# MANUFACTURERS' RECORD

A WEEKLY REVIEW OF THE IRON, STEEL, METAL & HARDWARE TRADES.

AND A MANUFACTURING AND TEXTILE PAPER, DEVOTED TO THE UPBUILDING OF SOUTHERN MANUFACTURES AND THE DEVELOPMENT OF THE MATERIAL RESOURCES OF THE SOUTH.

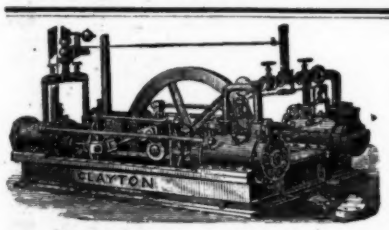
WEEKLY. $3.00 PER YEAR. | BALTIMORE, OCTOBER 11, 1884. | NEW SERIES, VOL. 6. No. 9.



—MANUFACTURERS OF—
CARD CLOTHING
Of Every Description.
COTTON and WOOLEN MACHINERY.

JAS. SMITH & CO.
Works, 413 to 421 Race St., Cor. of Crown.
Office & Store, 137 Market St., Philadelphia.

—DEALERS IN—
Manufacturers' & Mill Supplies
Of Every Description.



Improved Duplex Air Compressor.

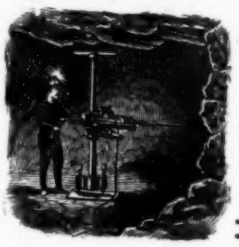
CLAYTON AIR COMPRESSORS
Rock Drills, Mining Pumps and General Mining Machinery,
For Catalogues, Estimates and Information, Address
CLAYTON STEAM PUMP WORKS, 45 & 47 York St., BROOKLYN, N. Y.

THOS. C. BASSHOR & CO.
—28 Light Street, BALTIMORE, MD.—

—MANUFACTURERS AND DEALERS IN—
Boilers, Engines, Pumps, Wrought-Iron Pipe, For Steam, Gas or Water.
Malleable and Cast Iron Steam Fittings,
Gas and Steam Fitters' Tools, Brass Work, Steam and Water Gauges, Steam and Hot-Water Heating Apparatus, &c.
SEND FOR ILLUSTRATED CATALOGUE.

ELEVATORS
Send for Illustrated Circulars.

STEPHEN A. MORSE. CARLTON M. WILLIAMS. EDWIN F. MORSE.
CLEM & MORSE,
Manufacturers and Builders of HYDRAULIC, STEAM, BELT and HAND-POWER, PASSENGER and FREIGHT ELEVATORS With most approved Safety Devices. Dumb-Waiters, Automatic Hatch-Doors, &c.
Sole owners of the right to apply the RUFE PATENT GOVERNOR to Elevators and Hoisting Machinery.
411 and 413 CHERRY STREET, PHILADELPHIA, PA. Branch Office, 108 Liberty Street, NEW YORK.



ROCK DRILLS, Air Compressors,
Machinery for Tunneling, Grading, Mining, etc.
Two Complete Tunneling Plants Furnished Northern Pacific R. R. Co.
For Catalogues, Estimates, &c., address,
INGERSOLL ROCK DRILL CO., 10 Park Place, New York.
MORTON. REED & CO., Agents, Baltimore.

LOVEGROVE & CO.
152 W. Third St., PHILADELPHIA, PA.

Engines, Boilers,
MACHINE & TOOLS.
Send for Circulars.

LOWELL CARD CO.
J. CLARK, President. S. S. GOULD, Treasurer.

—MANUFACTURERS OF—
CARD CLOTHING
Of Every Description, LOWELL, MASS.

# TEXTILE MACHINERY.

# THE BRIDESBURG MANUFACTURING CO.

## MACHINE BUILDERS,

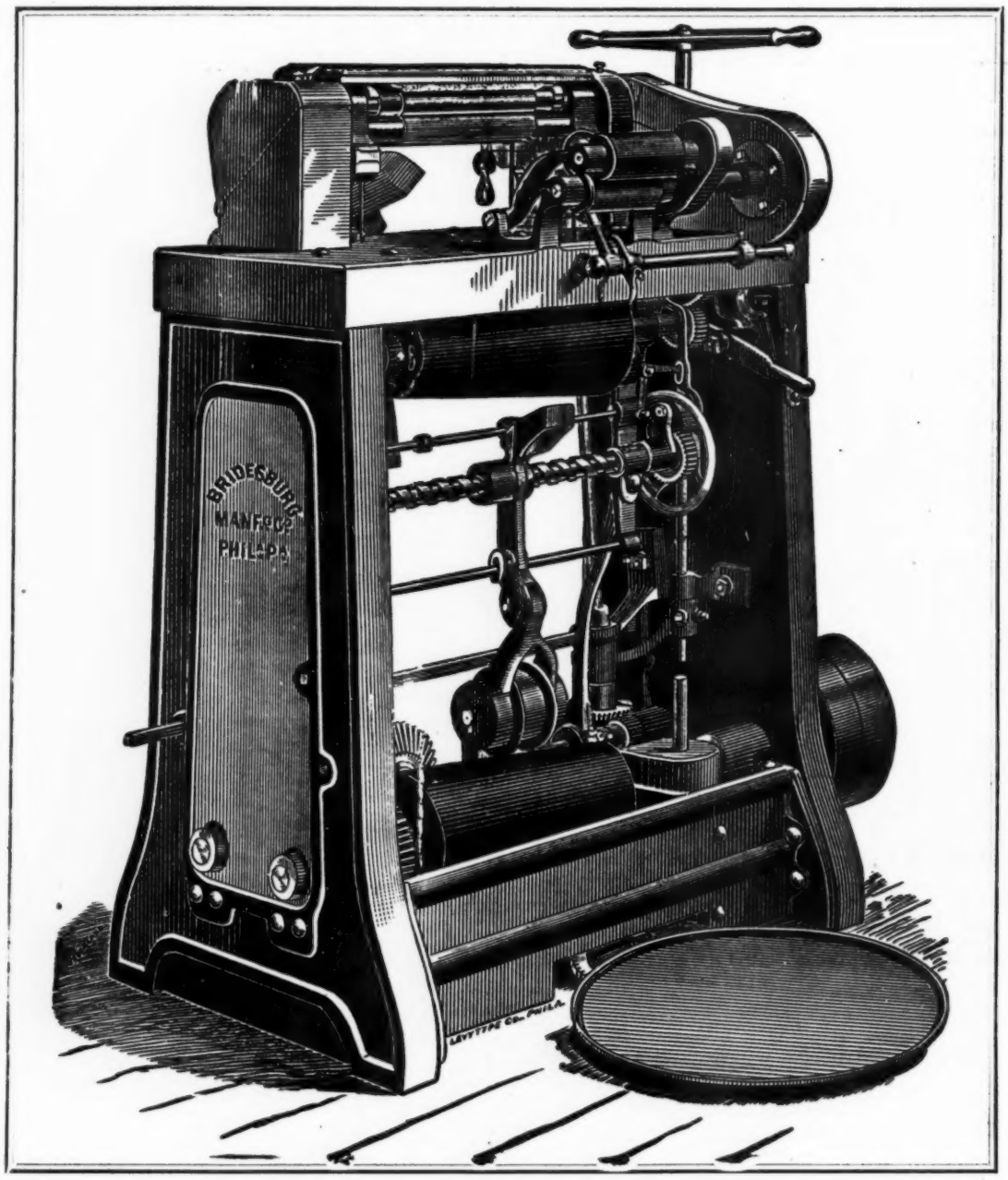
OFFICES, No. 201 CHESTNUT ST., PHILADELPHIA.

**CARDING, SPINNING, WEAVING,**

And all other Machinery used in Cotton and Woolen Factories.

—ALSO,—

Builders of the Foss & Pevey Under-Flat and All-Iron ROLLER CARDS.




**POWER SAVING, RING SPINNING,**

With Excelsior, Sawyer, Rabbeth, Birkinhead, or any of the approved PATENTED SPINDLES. The Excelsior Spindle drives the Bobbin positively and will run at any required velocity.

Self-Acting Mules for Wool,

All Recent Additions and Improvements.

## LOOMS

*For Cotton, Jean, and Worsted Goods, and Recently Improved and Superior* **Drop-Box Looms.** *with patent full lift, and full drop, skip-box motion and parallel pick, for Ginghams and Dress Goods.*

**STOCKTON BATES, President. JOHN ROMMEL, Jr., Vice-President. JOHN ROMMEL, 3d, Secretary and Treasurer.**

*Estimates for Mills and Plans for same, with all details, furnished by the best Mill Engineers at reasonable prices.*

# LOWELL MACHINE SHOP,

## LOWELL, MASS.

BUILDERS OF

# COTTON MACHINERY

OF EVERY DESCRIPTION.

**Lappers, Cards, Top Grinders, Lap Winders, Railway Heads, Drawing Frames.**

LOWELL SPEEDERS OR ROVING FRAMES.

**Fly Frames, Ring Spinning Frames, Filling Winders, Spoolers, Warpers, Twisters, Reels.**

SELF-ACTING MULES.

**Cylinder Slashers.** **L. M. S. Patent Hot-Air Slashers.**

## LOOMS

ELEVATORS, SHEARING MACHINES, BRUSHING MACHINES, SEWING MACHINES, CLOTH FOLDERS, CLOTH-STAMPING MACHINES, SIZE KETTLES, SIZE PUMPS, INDIGO GRINDERS, DRAWING-IN FRAMES, SHAFTING and GEARING.

☞Plans and Estimates Furnished on Application. ☞Correspondence Solicited.

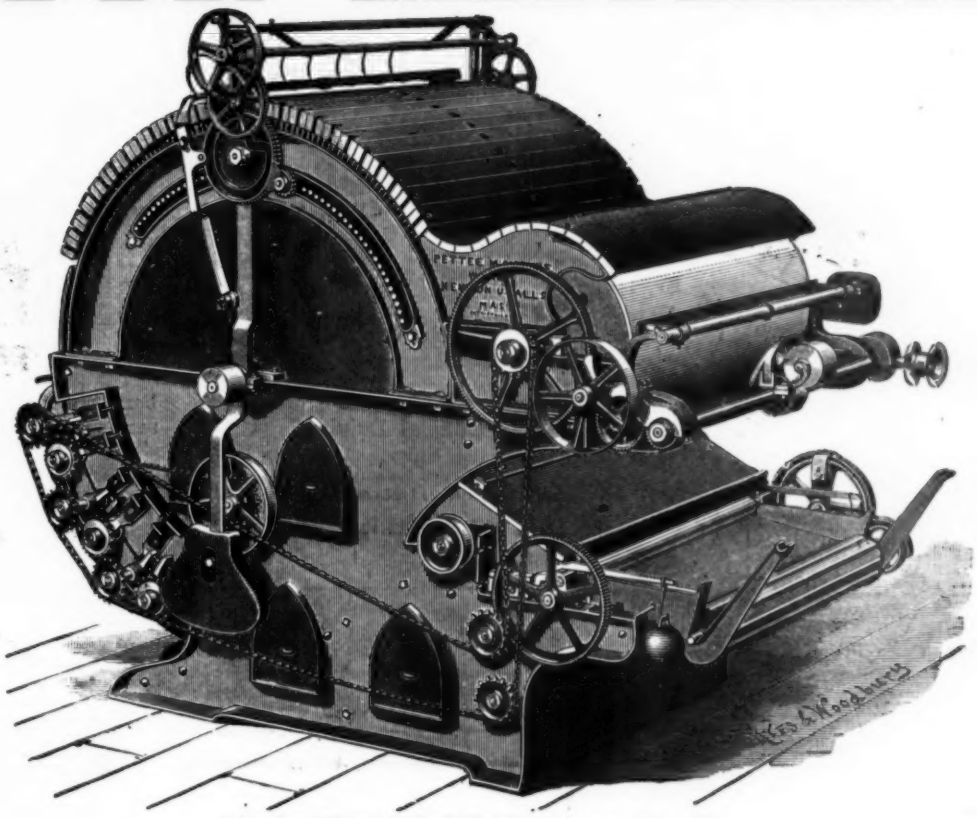
WM. A. BURKE, Treasurer, 28 State Street, Boston. CHAS. L. HILDRETH, Superintendent, Lowell, Mass.

ESTABLISHED IN 1831. **PETTEE MACHINE WORKS, Newton Upper Falls. Mass.**

BUILDERS OF

# COTTON MACHINERY.

Plans and Estimates Furnished.



Correspondence Solicited.

New Combination Cotton Card.

New Combination Cards, (48 in. diameter cylinder, 18 in. doffer,) Common Top Flat and Foss & Pevey Cards, Railway Heads, Railway Troughs, Drawing Frames; also *PATENT SPEEDERS* and *LOOMS* for goods ——from twenty-eight to sixty inches wide, plain or twilled.——

**HENRY BILLINGS, Prest.** **R. B. DALY, Supt.** **R. P. SNELLING, Treas., 40 Water St., Boston.**

# SACO WATER-POWER MACHINE SHOP,

BIDDEFORD, MAINE,

Manufacturers of

# COTTON * MACHINERY

OF THE MOST IMPROVED PATTERNS.

## CARDS,

Cylinders, 36x36 and 36x30, with 20 tops and Self-Strippers and Railway Troughs. Union Cards, with workers, strippers and tops.

**FINISHER RAILWAY HEADS.**

DRAWING FRAMES, ANY LENGTH, WITH 3, 4 AND 5 LINES OF STEEL ROLLERS.

**English Slubbers and Fly Frames, With Long or Short Bolsters.**

**BOBBINS**—12x6, 11x5½, 10x5, 9x4½, 8x4, 7x3½, 6x3, and 5x2½.

RING SPINNING FRAMES, 2, 1¾, 1⅝ AND 1½ INCH RINGS.

**TWISTERS.**

SELF-ACTING MULES, Parr, Sharp and Roberts' and Higgins' Pattern,

1¾, 1 5-16, and 1¼-inch Gauge.

**S. W. RICHARDSON, Treasurer,**
No. 1 Simmons Building, Boston.

**JAS. H. McMULLAN, Agent,**
Biddeford, Maine.

---

ADJUSTABLE SELF-OILING HANGER.

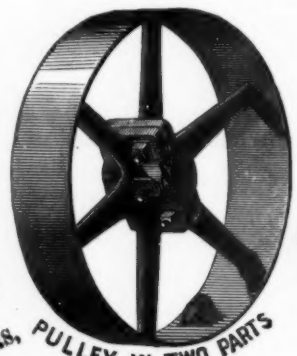
**FAIRMOUNT MACHINE WORKS.**
Office, 2106 Wood St., Philadelphia.

**THOMAS WOOD,**
Manufacture as Specialties

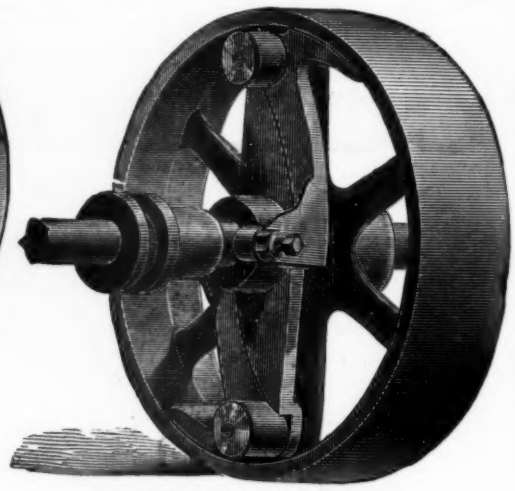
Power Looms, Patent Robbin or Quill Winding Machines, Plain and Presser Beaming Machines, Plain and Presser or Spooling Machines, Reeling, Warp Splitting, Dyeing, Sizing, Scouring, Fulling and Calendering Machines,

**WARPING MILLS,**
16, 18 and 20 yards Circumference,
WITH IMPROVED HECKS.

**SHAFTING,**
With Patent
ADJUSTABLE SELF-OILING HANGERS,
8, 10, 12, 15, 18, 20, 24 and 30 in. drop.
Also WALL, POST AND GIRDER HANGERS.
Pulleys, from 4 inches to 10 feet in diameter.
PATENT FRICTION PULLEY.
Pulleys in two parts, any size required.
PATENT HOISTING MACHINES.
Oil Presses for Lard, Fish and Paraffine.



PULLEY IN TWO PARTS



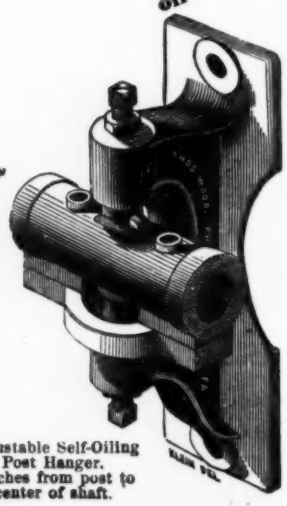
*PATENT FRICTION PULLEY.*
Simple, reliable and very durable. Suitable for any kind of driving, they serve equally well as driver or driven.

Ball and Socket Self-Oiling Pillow Block.

**Special Driving,**
such as Angular, Muley, and Gallows Driving, furnished for any position where possible to transmit power by belts.

**PULLEYS from 4 inches to 10 feet in diameter.**

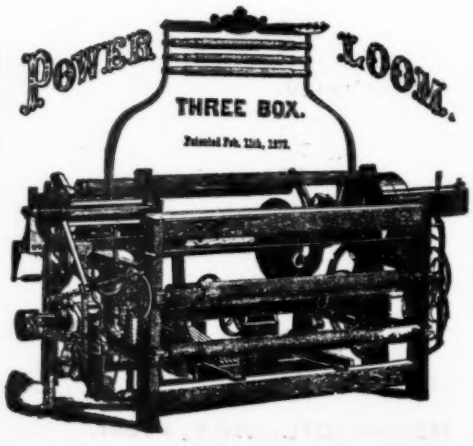
DOUBLE-BRACED ADJUSTABLE SELF OILING HANGER.



Adjustable Self-Oiling Post Hanger.
6 inches from post to center of shaft.

*Why use old style Bearings, that require oiling every day, when you can get Bearings at less cost that only require oiling once in Six Months, and thus save oil and labor enough to pay for the bearings in use. Test the matter for yourselves; a trial always secures the trade.*

ADDRESS.
**THOS. WOOD,**
Office, 2106 Wood St.
PHILADELPHIA, PENNA., U. S. A.



# HOWARD, BULLOUGH & RILEY,

BUILDERS AND IMPORTERS OF

# COTTON MACHINERY.

ALSO, IMPORTERS OF

**Wool, Worsted and Flax Machinery and English Card Clothing. Hardened and Tempered Steel Wire a Specialty.**

MILL ENGINEERS. No. 19 PEARL STREET, BOSTON, MASS.

GREAT SUCCESS OF OUR

**PATENT ELECTRIC STOP-MOTION,**

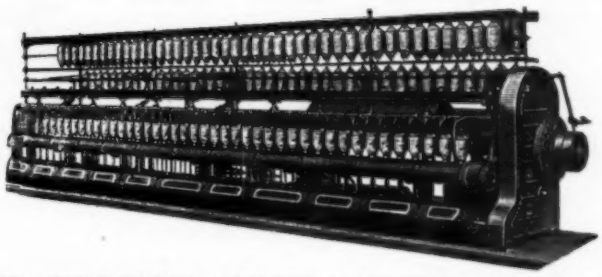
ALREADY APPLIED TO OVER

**9,000** DELIVERY HEADS OF DRAWING, AND

**62,000** INTERMEDIATE ROVING SPINDLES.

The quality of Sliver produced by our Frames surpasses all others, and Waste, Single and Roller Laps are prevented, and production increased.

**Correspondence Solicited. Send for Circulars.**



SPECIALTIES:

EXHAUST OPENERS, LAPPERS, (LORD'S EVENERS,) IMPROVED ROLLER CARDS, PRODUCE MORE AND MAKE LESS WASTE THAN ANY OTHER.

**7,000** SELF-STOPPING WARPERS, Already working with latest improvements.

**800** CYLINDER SLASHERS Now at work in America alone.

Patent and plain Spindle, Spinning and Twisting Frames, Spoolers, Reels and Circular Warpers, Cloth Fo'ders, Size Kettles plain and Fancy Looms, Spindles, Flyers and Fluted Rolls.

**SLUBBING AND ROVING FRAMES WITH LATEST AND BEST IMPROVEMENTS.**

# CARD CLOTHING.

ESTABLISHED 1786.

—Hardened and Tempered—

# STEEL WIRE

A Specialty.

## T. K. EARLE MANUF'G COMPANY,

**Worcester, Mass.**

# Improved Centrifugal HYDRO-EXTRACTORS

**Machine A.**

For Silk Dyers, with Vertical Engine on the side and Cone Pulley Friction.

**Machine B.**

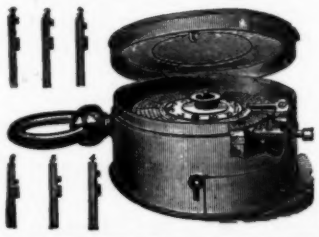
For Wool and Cotton Dyers, with direct-acting Steam Engine.

**Machine C.**

Runs by Belt and Friction Cones, suitable for water-power.

Three Sizes of Each Kind built by **W. P. UHLINGER, Nos. 26 to 48 East Canal St., Philadelphia, Pa.**

# Buerk's Watchman's Time Detector.



**IMPORTANT FOR ALL LARGE CORPORATIONS AND MANUFACTURING CONCERNS.**

Capable of controlling with the utmost accuracy the motion of a watchman or patrolman as the same reaches different stations of his beat. The instrument is complete in itself, portable, and as reliable as the best lever watch. It requires no fixture or wires communicating from room to room, as is the case with ordinary watch clocks.

**The Instrument will in all Cases be Warranted Perfect and Satisfactory.**

P. O. Box 2470. **J. E. BUERK, Proprietor, No. 230 Washington St., BOSTON, MASS.**

# MOSHELEY'S CELEBRATED MOLLIS OIL.

It is a splendid lubricator for Stationary Engines, Printing Presses, Paper Mills, Saw Mills, Cotton and Woolen Mills, Spindles, &c. It is the *cheapest* and *best* Oil for Machinery, Harness, Belts, Boots and Leather generally. Warranted a Water-Proof Leather Preservative. It is penetrating, and renders soft and pliable the hardest leather.

# Fire-Proof, Barn, Fence, Bridge and Roof Paint

MIXED READY FOR USE.

Our Fire-Proof Barn, Fence, Roof and Bridge **PAINT** is unsurpassed for painting exposed surfaces, such as Tin, Iron or Wood Roofs, Wagons, Farm Implements, Fences, Barns, Cars, &c., &c. mixed ready for use, will not settle, will be found convenient, saving labor and time, and at the same time is handsome and durable. ☞ SOLD IN ALL-SIZED PACKAGES FROM 1 to 50 GALLONS.

Prices Mailed on Application. **HIRSHBERG, HOLLANDER & CO., 195, 197, 217 and 240 W. Pratt St., Baltimore.**

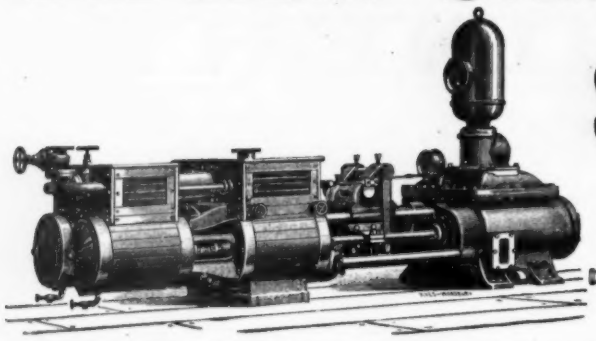
# THE DEANE STEAM PUMP CO., HOLYOKE, MASS.

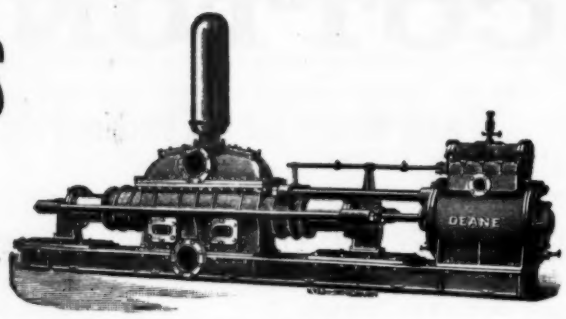
MANUFACTURE

## STEAM PUMPS

FOR

**Every Service.**






SEND FOR ILLUSTRATED CATALOGUE.

WAREHOUSES:

NEW YORK—92 and 94 Liberty St.
BOSTON—54 Oliver St.
PHILADELPHIA—49 N. 7th St.
CHICAGO—226 and 228 Lake St.
ST. LOUIS—620 and 622 N. Main St.

**Water-Works Pumping Engines.**

Single, Duplex, Compound, Condensing or Non-Condensing. Estimates furnished on application.

**Mining Pumps.**

Our Patent Double-Plunger Sinking Pump has been adopted by the leading mines.

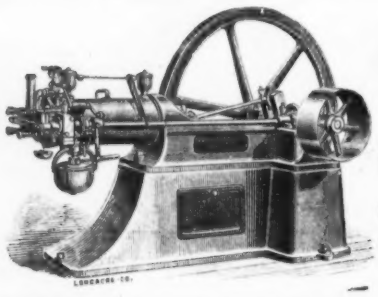
INDEPENDENT CONDENSING APPARATUS A SPECIALTY.

# RENDROCK POWDER COMP'Y,

MANUFACTURER OF THE INGREDIENTS OF THE NEW PATENT BLASTING POWDER: **RACKAROCK.** IT CONTAINS NEITHER GLYCERINE NOR NITRO-GLYCERINE IN ANY FORM.

**It Does Not Freeze.** Can be shipped by express, railway or steamship lines. Neither of the two ingredients are explosive until combined, and when combined are safer than Dynamite. This explosive approximates Nitro-Glycerine in strength. Send for circulars to

RENDROCK POWDER CO., 23 Park Place, New York.



Over 14,000 in Use. **Otto Gas Engine** 20 to 70 per ct. less Gas consumption than ANY other ENGINE.

Working Without Boiler, Steam, Coal, Ashes or Attendance.

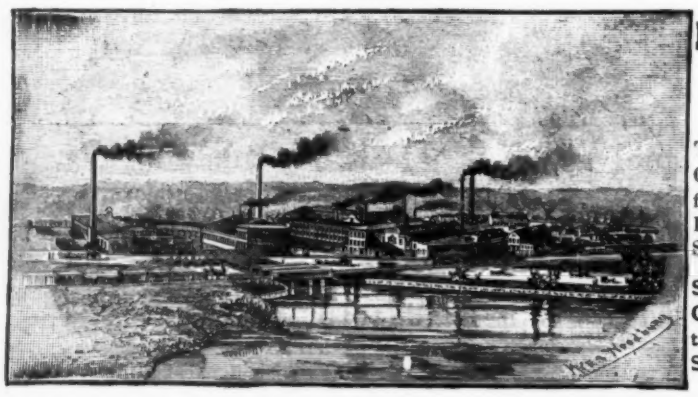
Started instantly by a Match, it gives full power immediately. When stopped, all expense ceases.

No explosions, no fires nor cinders, no gauges, no pumps, no engineer or other attendant while running. Recommended by insurance companies. UNSURPASSED IN EVERY RESPECT for hoisting in warehouses, printing, ventilating, running small shops, &c. **Sizes: 1 to 25-horse power.**

Branch Office, 214 Randolph St., Chicago. SCHLEICHER, SCHUMM & CO., N. E. cor. 33d and Walnut Sts., Philadelphia.

# Washburn & Moen Manufacturing Co., Worcester, Mass.

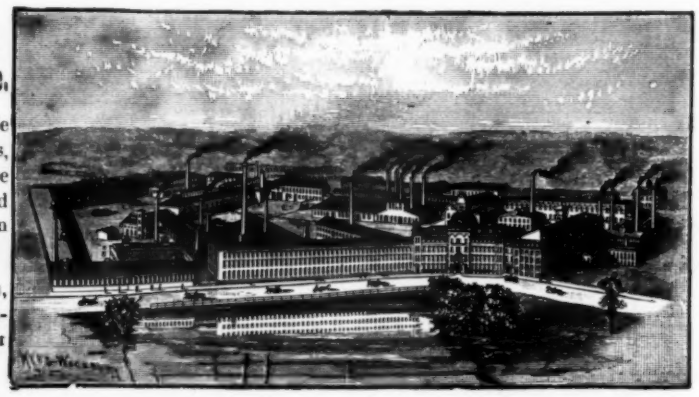
## Wire Drawers, and Manufacturers of Iron and Steel Wire of Every Description



**Iron and Steel Telegraph and Telephone Wire.**

Patent Steel Wire Bale Ties, Pump Chains, Chain Wire, Steel Wire for Springs, Needles and Drills, Watch Main Springs.

Send for Price-Lists, Circulars and Descriptive Pamphlets on Our Specialties.



NEW YORK WAREHOUSE:
21 Cliff Street,
New York City.

## GLIDDEN PATENT STEEL BARB WIRE.

The Best Fence Material in Use.
For Sale by Special Agents and Hardware Dealers in all Parts of the United States.

Proof against Fire, Wind and Flood.

CHICAGO WAREHOUSE:
107 Lake Street,
Chicago, Illinois.

## GREAT SOUTHERN DESPATCH,

FAST FREIGHT LINE BETWEEN
BALTIMORE AND THE SOUTH AND SOUTHWEST,
Via WESTERN MARYLAND RAILROAD.

For Rates and other information apply to or address:

B. H. Griswold, G.F.A., W.Md.R.R., Balto. A. Pope, Gen. E. Agt., Roanoke, Va. D. K. Houck, Sol. Agt. 133 W. Baltimore St. J. H. Geigan & Co., Agts., 133 W. Baltimore St. D. H. Knipple, Agt., Hillen St.

## Peerless PRESSURE RECORDING GAGES

make a perfect record of all Steam, Water or Gaseous Pressures. **Best and Cheapest Gage in the World.** SEND FOR CIRCULAR. FOR SALE BY THE TRADE.

S. P. JONES, 28 School Street, BOSTON, MASS.

BALTIMORE

# Manufacturers' Record.

PUBLISHED EVERY SATURDAY.

—OFFICE,—

71 and 73 Exchange Place, Cor. Commerce St.,

—BALTIMORE.—

R. H. EDMONDS, Editor.

WM. H. EDMONDS, Associate Editor.

NEW ENGLAND BRANCH OFFICE:
Room 1, No. 19 Pearl Street, BOSTON, MASS.
*JESSE W. BIGSBY, Resident Partner.*

—SOUTHERN OFFICE, ATLANTA, GA.—
*I. W. AVERY, Manager.*

NEW YORK OFFICE, Room 14, No. 29 Park Row.
*JAMES L. ELY, Manager.*

**Price of Subscription Per Year in Advance:**
(POSTAGE INCLUDED.)

| | |
|---|---|
| TO UNITED STATES AND CANADA, | $3.00 |
| OTHER COUNTRIES, - - - | 4.50 |

**ADVERTISING RATES:**

| | |
|---|---|
| One square (14 lines Agate, 1 inch) 1 time.. ... | $ 1.50 |
| " " " " " 4 " ..... | 5.00 |
| " " " " " 3 mos..... | 10.00 |
| " " " " " 6 " ..... | 18.00 |
| " " " " " 1 year..... | 32.00 |

For advertising on outside pages add 50 per cent. to the above rates.
Reading Notices 50 cents per line each insertion.

BALTIMORE. OCTOBER 11, 1884.

A SYNDICATE, composed of leading iron makers, is experimenting with the Henderson process of making soft steel, and so far the trials have been satisfactory, the waste and fuel being less than has heretofore obtained in other furnaces or the Bessemer converter. With a small outlay for plant, labor and repairs, great advantages over other established systems of making steel are claimed to iron manufacturers who are about to change to steel. Mr. Henderson uses all kinds of pig or scrap iron or steel, removes copper, sulphur and phosphorus, and produces open-hearth soft steel, with 0.12 per cent. to any higher degree of carbon, uniformly and as required.

THE progress of manufactures in Georgia, since 1880, is very elaborately shown in this issue of the MANUFACTURERS' RECORD Many of the statistics presented in the very interesting article published to-day have appeared in our columns before, but they are here grouped together in such a way as to give a most excellent idea of what has been done towards developing the industrial interests of Georgia. What has been accomplished in this one State is only a sample of what every State in the South has done during the last four years, and what has been done during the last four years does not begin to equal the progress that will be made during the next four.

**Our readers will confer a favor upon our advertisers and upon us, as well as benefit themselves, if, whenever they write to anyone advertising in this paper, if it is only for a catalogue, they mention that "your advertisement was seen in the BALTIMORE MANUFACTURERS' RECORD." A careful compliance with this request will be much appreciated.**

## Growth of the Smaller Industries in the South.

The general depression in the cotton goods and iron trades has of course caused a temporary lull in the building of new cotton mills and blast furnaces at the South, though there is even now considerable work being done in completing those previously organized. We are not quite sure that this present dullness is altogether an evil to the people of the South, as there was much danger for a while that they would rush into building mills and furnaces without a careful examination of the prospects for success—a danger that the MANUFACTURERS' RECORD called attention to on several occasions last winter. At one time the most absurdly extravagant statements as to the enormous profits—reported sometimes as high as from 50 to 87½ per cent.—of Southern cotton mills and furnaces were repeatedly made, and naturally those who had money to invest without the ability or experience to carefully examine such matters for themselves were too much disposed to neglect other industries and invest exclusively in cotton mills or furnaces. The South can unquestionably produce pig iron at a lower cost than other sections of the country, but of what advantage is this, if the chief markets for Southern pig iron can only be reached at an expense of several dollars a ton freight. As we have repeatly stated the South needs diversified industries that use pig iron as a raw material far more than she needs more furnaces. The present depression in cotton goods and iron is having at least one beneficial effect, and that is to impress upon Southern people that a good location, good machinery and careful management are just as essential to permanent success in manufacturing in the South as elsewhere. Of course these facts are fully appreciated by the majority of Southern business men, but the rage for building new cotton mills was drawing into the business some who did not understand their importance. The lesson now being learned will prove of much value, though it will not materially restrict the further development of the South's cotton manufacturing interests; it will rather tend to keep them in a safe and sound condition. Moreover, this depression has served to prevent all interest being centered in the manufacture of cotton and iron, and this has helped to stimulate the establishment of other industries. Of late there has been a very marked tendency at the South to pay more attention than formerly to the smaller industries, and the list of agricultural implement factories, furniture factories, foundries and machine shops, fertilizer factories, planing mills, sash, door and blind factories, and kindred enterprises designed to manufacture such things as are in constant demand, and which have heretofore been mainly purchased elsewhere. We have often claimed that these smaller enterprises offered fully as good prospects for financial success as the large industries that require such heavy capital, and we are inclined to believe that not only is this true, but, that so far as the general good of the South is concerned, more is to be hoped for from a vast number of diversified industries scattered all over the South than from a comparatively limited number of big factories or mills.

From one end of the South to the other there are almost countless openings for these smaller industries, such as wood-working establishments of all kinds, machine shops, agricultural implement factories, and similar enterprises that do not require a large outlay of capital, and at the same time have raw material cheap and abundant, with a good home market for their productions.

## Southern Business Prospects.

The very elaborate reports as to business prospects in the South, which we lately published, and which almost unanimously predicted a good fall and winter business, despite the short cotton crop, are very strongly confirmed by similar reports, but of course from different correspondents, to the Atlanta Constitution. The Constitution's reports are in entire harmony with those lately given in the MANUFACTURERS' RECORD, showing that while the cotton yield has been reduced by the drought, the production of foodstuffs has been unusually great, fully counterbalancing the loss of cotton, and moreover, the financial condition of the planters is claimed to be much better than in former years. Summing up all its reports, and taking a general survey of the field, the Constitution says it will appear:

1st. That an abundance of food crops, such as corn, wheat, oats, small crops, grasses, etc., has been made and harvested, and that the barns are full.

2d. That the cotton crop is short from one-fourth to one-third, owing to the drought now prevailing.

3d. That the trade outlook is good, and that fine and safe business may be expected for the next few months.

4th. That the condition of the farmers has steadily improved; that they are rapidly adopting the policy of raising the farm supplies on the farm, and are improving the condition of their farms.

5th. That the towns and cities throughout the State and adjoining States are improving rapidly, and building up as fast as could be expected.

And further it is said: "The prospect is encouraging. It is true that cotton is short, perhaps one-third, on account of the drought, but the food crops are exceptionally abundant. It goes without saying that a people with plenty to eat are masters of the situation. Their safety is assured beyond all doubt. With a surplus of food for man and beast we can stand a little financial depression. The contraction of the volume of traffic will do little substantial harm when plenty sits enthroned at every farmer's fireside.

The wisdom of diversified farming was never more emphatically demonstrated than during the season now drawing to a close. If our farmers had gone in debt, and had placed themselves in a situation where they would be compelled to buy food and other supplies next spring on credit, the short cotton crop and the stringency of the times, would prove fatal to thousands.

As it is, peace, plenty and prosperity dominate the solid South."

These statements are substantially the same as what we have several times lately said, and we do not think it possible to successfully question their accuracy.

THE *American Machinist* is one of the last papers that we would have expected to see taken in by that little free advertising dodge of some one in Ohio, who for the last *six* months has been sending the same letter to papers all over the country, telling about how her uncle, who was visiting her just *three* months ago, told her how to make money by making a plating machine and re-plating silver-ware for her neighbors. This information she generously offers to send to any one who will send her a specimen of ore, stone, &c., for a cabinet of geological specimens. Of course there is something else back of it than mere generosity. This letter is of the same kind as one that is seen every few days in some paper, telling of the great profits in poultry raising, the value of an incubator, and how the writer did such wonderful things with his incubator, and then he incidentally mentions that Mr. So and So makes just the kind of incubators needed. This letter is so artfully prepared that many papers are being constantly deceived into giving it space, thinking it a special contribution to their columns and overlooking the advertisement hid away in it.

THE wonderful development of the material resources of North Carolina during the past five years, according to a Raleigh correspondent of the News and Courier, surpasses belief. It is a story of steady progress, of grand undertakings, of gratifying success, of incalculable promise. The growth has been steady and even, and the old North State is moving straight forward at the head of the column of Southern States. The great exhibition which was opened here to day is only another step in the march of progress. In the variety and richness and extent of the exhibition it stands far ahead of any previous exposition of the illimitable resources of the State that has ever been attempted.

THE *Baltimore Trade Journal* is the latest newspaper candidate for public favor in this city. It is issued weekly, and is devoted to the general commercial and financial interests of Baltimore. A vigorous, enterprising paper of the character promised by the publisher of the Trade Journal—Mr. W. R. Woody—should meet with liberal encouragement from our merchants.

THE *Sea Island News*, of Beaufort, S. C., has issued in pamphlet form an an annual review of Beaufort, Port Royal, and the Sea Islands giving much information of interest about these places.

# WEALTH IN WOOD.

## The South's Vast Timber Resources.

### Something of the South's Immense Forests of Pine and Hard Wood.

By CHARLES H. WELLS.

[For the BALTIMORE MANUFACTURERS' RECORD.]

*(Concluded.)*

On the Greenville & Columbia railroad there are many fine tracts of timber land, many of which are for sale at a reasonable rate; several large tracts have been sold to Lewiston, Maine, capitalists who are investing in timber lands in South Carolina. Atlanta merchants are also buying there in large tracts. There are now twenty firms engaged in the lumber business in Atlanta, which city, with its seven trunk lines, promises to lead every city south of Baltimore in the sale of lumber. The wood that is most in demand just now is the yellow Georgia pine; it is in a big run all over the country and is rapidly coming into popular favor as one of the finest of our native woods for fine interior finish. There is a hotel, (the Arcade,) at Springfield, Ohio, finished in Georgia pine from top to bottom inside; even the floors are all laid in Georgia pine; they give it a coating of oil and shellac, which makes a natural hard wood finish, and is very beautiful. The "Luray Inn," at Luray Caverns, Va., and the Roanoke hotel at Roanoke, Va., are built in the "Queen Anne" style, and finished inside with Georgia pine. In Paris there is a craze just now for furniture made from this wood. The mill of Mr. D. Lowry, near Garfield on the East Tennessee, Virginia & Georgia railroad turns out 11,000,000 feet annually of the best grade of this valuable pine, and in a few years Mr. Lowry has amassed a fortune of $100,000 in this business.

In conclusion, I will speak of the Tennessee, Georgia, Alabama, and Louisiana tracts—the most beautiful lumber to be found anywhere on the American continent; seek where you will, from where the great Atlantic washes the rocky coast of Maine, to the golden gate of California, from the Polar sea to the Tropical Gulf,—there are no finer stretches of timber land to be seen than those in the States just mentioned. Beginning with the first and most important State, Tennessee, let us discard the stilts of the scientists, and the iron tracks of the four great railroads penetrating the country, and take it afoot along these sparkling streams, across the hills and dales teeming with redundant crops of grass and grain, and over the mountains bristling with unbroken forests of primeval growth, and, "with an eye single to business," see what there is to lure the iron masters of more crowded regions to bring their money and their labor here, or to induce the shrewd lumberman to move his mills and enterprise from the rigorous, wintry regions of the great Northern forests, rapidly nearing exhaustion, to this almost virgin field of production in his peculiar line. As our journey will be through a country much of which is in its natural state, it may not be out of place to consider for a moment the scenic beauty, and grandeur of the region "as God made it," and, if we have a spark of sentiment in our natures, we may indulge the hope that after the hands of sturdy men shall have slain the forests; after the deep buried treasures have been delved for, found, and torn from the mountain side; when the roar of many furnaces shall drown the murmur of the water-falls, and their lurid, hissing flames light up the valleys and towering peaks at night; when the ivy-grown cliffs on either hand echo alike the crashing whirr of the saw mill and the shriek of the locomotive and its thundering train, there will still remain, indestructible by human agencies, and co-existent with the solid globe itself, the beautiful outlines of these "blue Tennessee mountains," painted in a word-picture of incomparable beauty by their own child of genius,—the poet and orator, Landon C. Haynes, who now,

"Life's fitful fever o'er,
Sleeps well"

beneath the soil of his loved Tennessee.

Beginning with Holston Mountains, a high line of hills, we tramp northeastward. The distance is quite thirty miles to the Virginia line, and it is nearly all in forest; till we follow it some twenty miles there is no great quantity of high grade timber. The trees are not so large as upon other ranges where the soil is richer, still there will be a great deal of timber taken from it at no distant day. There is a large growth of medium-sized black or yellow pine on it. On the Stony Creek side it has been considerably denuded in making charcoal for the forges and furnaces. On the northwestern side, next to the Holston River, little if any cutting has been done, and there is much good timber, some white pine, large quantities of white oak, red and black oak and chestnut, and in many of the hollows large and excellent yellow poplar. This mountain will yield a large supply of the best tan bark, chestnut, oak, and hemlock, as these trees are very plentiful in many localities. Reaching "Cross Mountain," we enter a magnificently timbered region, being the whole of "Shady," and the slopes of the Holston and Iron Mountain on the Virginia line. The growth of white pine in the eastern part of "Shady" for miles rivals such forests in the Northern States as have supplied so long the large demands of the cities and towns there. Hemlock, cherry, poplar, the oaks, maples, and chestnut are of great size, and are abundant all through "Shady," and down the slopes of the mountains. One strange fact is presented: there is not a hickory tree or sapling to be found in the entire region; just beyond "Shady" the great "White Top" Mountain, 5,000 feet in height, forms the boundary line between Tennessee and North Carolina. Here we are again in the home of the white pine, and it is the king of timber trees here; a belt of it runs along "Stone Mountain," through Johnson County, and here and there through Carter County, all the way to the "Roan" and "Yellow" mountains. There is a great deal of very valuable timber of all varieties I have named in Johnson County, on the east side of Roan's Creek, up to the State line of North Carolina and Virginia. Doe Mountain has a little, but not much good timber on it, and in Carter County there is not now remaining much good timber, except near the North Carolina line. In the broken and mountainous district, lying above Hampton, and between the Doe, Watauga, and Elk, there is one block over 100 miles square of unbroken forest, worth a mint of money to some energetic man. In the "Walnut Hills" district is found the most beautiful walnut lumber in abundance, while cherry is also plentiful. The "Cranberry Narrow Gauge Road" has opened up all the "Crab Orchard" district in Carter County, and many mills are now at work, cutting hundreds of thousands of feet of the finest cherry and ash, and a good deal of walnut, and still more poplar and oak timber, taxing the little railroad to its utmost to move it, making Johnson City the largest lumber depot on the East Tennessee, Virginia and Georgia Railroad. An important factor to be taken in consideration is the low price of land all through the State. Those who own the property are willing to sell cheap, and a prominent land owner writes: "The low price of land has been the broad firm basis of prosperity in this country, from the landing of the Mayflower to the present time, because of the three factors of land, labor, and capital, the share of the first, viz: land has not been in excess of the two latter, as has been the case in the old world. Where these conditions are changing to the reverse, (that is, where land, through rent, is getting more than capital and labor, or either of them,) in our country the prosperity of the whole country is lessening. If there is becoming, as is claimed by some, an unequal distribution of wealth, wherever it exists, it is chargeable to this cause and no other. Comparisons between our eastern and western States, and conditions ruling therein, tend plainly to prove this. The ignorant and envious may charge in vain that large owners of railways are monopolists, for the charge will not stand one moment, when all the facts are traced in connection with each other, and properly placed so as to be clearly comprehended by all. When this is accomplished we shall hear no more of their being responsible for communism and its developments in this country. The facts in reference to these large operators are, that, so far as their railways are concerned, they are purveyors to public wants; as much so in principle as any who are engaged in any pursuit, and if all these so-called monopolists were translated bodily, with all the certificates of ownership of the property they represent, all so represented would remain intact just as it is now, performing the same, or more likely enlarging functions. This cannot as truly be said of owners of large landed property, because the prices of land and charges for use of the same continually advance, while the charge for railway service notoriously lessens all the time from competition; it has, as a matter of fact, been for years past, lessening, and often at times when every other species of property was advancing in price. And further, mechanical property of every description is perishable, requiring, from use and natural decay, constant renewal, which land does not; this is an additional reason why land should bear all taxes; the nearest approach to monopoly that is effective, and likely to become more so, is land, because of it being so lightly taxed. *The more equitable and liberal the laws regulating access to land, and its occupation and use, the greater will be our prosperity, and the longer its continuance.* The practices or legislation that steadies its prices, and that keeps it from advancing, will enhance past, and tend to largely increase future prosperity. Anything which tends to advance the price of land makes it an unsafe basis of credit, the security of which lessens very generally in proportion to the advance, and often becomes the destroyer of all, or at least of general credit. Whenever it is credited with having utility it does not possess, evil results must ensue, and the longer these are deferred, very generally the greater they are."

Leaving Tennessee, we pass through upper Georgia, where some of the finest pine in the world is growing. The Atlanta manufacturers have gotton hold of nearly all the valuable land, and as it is my intention to treat only of those sections open to investment, we will pass at once into Alabama.—Possibly no condition of affairs in any country ever presented so impregnable a front against the revolutionizing influences, and changing customs of a progressive age, as did that of Alabama before the war. The land, as a rule, was held not in acres, but in square miles, by single individuals, through inheritance, deed or purchase; a plantation of the *ante-bellum* days used frequently to extend over an area covering many square miles of territory. These great plantations have been cut up into farms, and, as a result, much valuable timber land is for sale. Capital has poured into this section as the waters of a mighty river break through its banks, and has resulted in the establishment of mills, foundries, factories, and manufacturing enterprises of every character; has torn away the barriers of earth that have so long hidden the mineral treasures, and exposed rare qualities of coal and iron ore in incalculable quantities. The same power has crossed her fields with iron tracks of the railways; hewed her mighty forests for shipment, not only throughout our own country, but to Europe as well; has builded her cities, revived her commence, re-established her credit, developed her resources, and brought her before the notice of the world as one of the most favored sections of the country upon the globe. To capital, then, Alabama holds her outstretched arms and many there be, just now, who are availing themselves of this opportunity. There is a portion of Alabama known as "the long leaf-pine region." It is thickly timbered with this valuable yellow pine lumber, which contributes to the supply of nearly every European city, and provides masts and spars—so tall, strong, and straight is this timber—for the sailing vessels of almost every nation on the globe. A railroad has just been finished through this section, and it goes without saying that the resources of the country have scarcely been touched. These resources exist at present almost wholly in pine forests, which cover thousands of square miles of territory, and seem absolutely inexhaustible in their profuse growth and magnificent developement. Before even the survey of the line had been completed, numerous sites for saw mills had been selected, and within a few months after, machinery had been hauled in wagons from Enterprise and Meridian, (its transportation occupying days and often weeks,) was erected and set to work; until at the present date, upon the completion of the railway, there are millions of feet of accumulated sawed timber awaiting transportation to Northern and Eastern cities, and to New Orleans for shipment abroad. The surface of the country is rolling and undulating, with almost park-like regularity, and one frequently sees stretches of country which, with its long luxuriant growth of Bermuda grass, its groves of graceful young pine and cedar, and its gentle slopes, bubbling springs and charming depressions, and miniature valleys, might rival in beauty many of the city and suburban parks of Northern and Eastern sections. Although the soil with careful treatment will prove profitably productive, the principal industry must remain that of timber shipping for many years to come.—These lumber lands may be purchased at from $3 to $5 per acre, and will yield from eight to ten thousand feet of sawed timber to the acre, worth from $40 to $60, for which there is a ready market in the rapidly growing cities of the Southwest. The only investment neccessary is that in the lands themselves and in the machinery for sawing.

Leaving Alabama we enter Louisiana, and find vast territories of pine. There are above 2,000,000 acres of "Government land" in Louisiana, the largest portion of which lies in the leaf-pine region. These lands can be entered under the United States Homestead Act, or purchased at one dollar and twenty-five cents for ordinary land, or two dollars and a half for that lying along the route of a projected or completed railway.—The varieties of the timber of Louisiana are even greater than those of Tennessee or Alabama, and embrace the red cypress and other woods especially adapted for interior decoration and cabinet work. In Arkansas may be found pretty much the same kind of timber, in equally large quantities, and at the same slight cost.

I have already transgressed the limits of space and will conclude with a few figures of interest: Of land in farms in the whole country in 1880, which was 536,081,835 acres, the South contained 361,717,691 acres, or over one-half of the whole. Of the improved land in farms, which was 284,771,042 acres these States contained 102,962,453 acres, *leaving 259,956,159 acres there yet for improvement, or an amount greater than the total improved lands at present in all the States of the Union, excepting Illinois.* The total number of farms in the United States in 1870 was 2,656,985; in 1880 it had increased to 4,008,907, or 51 per cent. The total number in the South in the former year was 925,604 and in 1880, 1,737,468, so that while the number of acres of improved land had increased 47 per cent. in the ten years between 1870 and 1880 the number of farms increased 88 per cent., showing a sub-division of land

into small farms, which is one of the most conclusive evidences of the progressive action in agriculture. In 1880 the product from the soil of this section amounted to $176,000,000 in value, or 30 per cent. of that of the whole country, while the value of the land and improvements was but 27 per cent., and it did this too with much less proportionate cost for machinery and implements than was experienced by other sections of the country, being but 22 per cent. of the whole. Useful as machinery and implements are upon the farm, it is proper that their cost should be considered.

Great as these States are in cotton, tobacco and rice productions, they yet produced 716 million bushels of grain in 1880, including 573 million bushels of corn, 63 million bushels of oats, 709 thousand bushels of buckwheat, ¾ million bushels barley, 75½ million bushels of wheat and 2½ million bushels rye. The increase of the whole in ten years was 71 per cent., an excellent showing. She also produced 350 million pounds of tobacco, out of the total for the United States of 472¾ million pounds; 73¾ million pounds of rice, 31¼ million pounds of wool, an increase of 100 per cent. in ten years; 15 million bushels of potatoes, 6 million bales of cotton and 2½ million tons of hay, which, while less than New York or some other single State, it shows that she can raise hay and grass.

## Georgia Manufactures.

### A Story of Marvellous Industrial Expansion.

The rapid progress of the South since 1880 has been a subject of constant discussion in the MANUFACTURERS' RECORD, and as a summary of what one State has done we extract from the Chronicle and Constitutionalist of Augusta, Ga., the following interesting figures: In 1860 Georgia had 1,800 manufacturing establishments, standing fifth in rank. In 1870 she has grown to 3,855 establishments in spite of the disastrous effects of the war. Georgia, in increase, leaped from the fifth to the third place in rank in number of establishments, being only led by Kentucky and Virginia. But in extent of increase, Georgia led the whole South, her growth running from 1,890 to 3,866, or 1,965—over 100 per cent. in increase. Kentucky grew from 2,450 to 5,390, or 1,940, being 25 per cent. less than Georgia. While her percentage of increase was under 50 per cent., Georgia's was over 100. Virginia's increase was only 548, or a little over 10 per cent. North Carolina fell off in this decade,—from 1860 to 1870,—the number of 47 establishments, South Carolina grew from 1,230 to 1,584, or 354—or about 25 per cent.

From 1860 to 1870 the growth of manufacturing capital in Georgia was over three millions of dollars. She stood fourth in 1860 in extent of this capital, being lead only by Kentucky, Virginia and Tennessee. Georgia led both Tennessee and Virginia in her increase of capital; Tennessee enhancing only a little over a million, while Virginia fell off. Georgia's expansion in capital from 1860 to 1870 was from $10,880,875 to $13,930,135, or in exact number, $3,039,260 or nearly 33 per cent. North and South Carolina fell off in this decade in capital.

The most remarkable results in the decade of the war were in the manufacturing production. Georgia's growth in products of this sort was simply amazing. She sprang from $16,925,564 to $31,196,105, or the enormous sum of $14,270,541—or 90 per cent. With only one-third increase of manufacturing capital she had nearly twice increase of products. With over 25 per cent. less capital than Kentucky, she made almost as great an increase of production. Georgia stood fourth in extent of production in 1860, but first in ratio of increase of production in the decade.

Coming on to the decade from 1870 to 1880, there are some curious aspects of manufacturing progress. Georgia, like nine of twelve Southern States, fell off in the number of manufacturing establishments with a large increase of capital and production, demonstrating that there had been an enlargement in the size of establishments. Georgia's decrease in number was 262. South Carolina increased 404, and North Carolina 160. In increase of capital, Georgia from 1870 to 1880 outstripped all the Southern States except Kentucky and Virginia, taking the honorable rank of third, passing Tennessee handsomely. Georgia grew from $13,930,135 to $20,766,995 or the fine sum of $6,836,760 in manufacturing capital. South Carolina came up splendidly in this decade, growing $5,805,476, and absolutely outstripping North Carolina in its ratio of growth. Her growth of capital was nearly 50 per cent.

In growth of manufacturing production from 1870 to 1880, Georgia swelled from $31,196,105 to $41,162,811, or $9,966,33—or over 30 per cent.

There were in operation in the year 1880, 4,713 looms, 200,974 spindles, employing 6,678 hands, and consuming 67,874 bales of cotton. Georgia jumped from fourth to the third place in manufacturing products.

Unfortunately the census of 1880 does not give the full detail of manufacture. Georgia had 81 kinds of manufactures. The leading industries were flour mills, carpentering, blacksmithing, lumber and cotton manufacture. Georgia in 1870 had among her larger specialties beside these, leather and wheel manufacture; and in 1880, iron foundries, brick, tar, turpentine, tin, crackers and candy on a large scale. Since 1880 Georgia has been doing a phenomenally large business in lumber, cotton, fertilizers and tar and turpentine.

We will take up the three controlling staples of manufacture in all the Southern States—cotton, flour, and lumber. Georgia leads overwhelmingly in cotton—doubling any single State. In 1880 she had 63 cotton factories, with a capital of $6,632,142, making a production of $7,295,356. That gallant little South Carolina stood second, with a production of $2,895,769. The whole capital in the South in cotton manufacture was $17,782,197, of which Georgia alone had over one-third, and made one-third of the products. North Carolina had five more establishments, but made over 100 per cent. less product.

Since 1880 Georgia has increased her cotton mill capital over six millions of dollars, and in this August, 1884, has $13,000,000 invested in cotton manufacture, and has nearly one-half of the Southern capital, and makes nearly one-half of the Southern manufacturing products. Her products will go to $14,000,000 annually with 70 mills, 7,843 looms, 340,130 spindles, employing 10,000 hands, and consuming 100,000 bales of cotton.

From June 1st, 1880, to January 1st, 1884, Georgia increased her looms from 4,713 to 7,843, or 3,130; her spindles from 200,974 to 340,130, or 139,156. The addition to her cotton mills was 22. The following is the increase in cotton milling in the South during this period from June, 1880, to January, 1884, taken from the BALTIMORE MANUFACTURERS' RECORD, and showing Georgia to continue her leadership.

*Increase from June 1st, 1880, to Jan. 1st, 1884.*

| In | No. of Mills. | No. of Spindles. | No. of Looms. |
|---|---|---|---|
| Alabama | 7 | 26,985 | 534 |
| Arkansas | 2 | 4,285 | 2 |
| Florida | 1 | 1,102 | ... |
| Georgia | 22 | 139,156 | 3,130 |
| Kentucky | 2 | 17,242 | 398 |
| Louisiana | 5 | 33,571 | 704 |
| Maryland | 5 | 44,286 | 256 |
| Mississippi | 3 | 22,956 | 416 |
| North Carolina | 43 | 110,395 | 1,583 |
| South Carolina | 17 | 98,200 | 1,614 |
| Tennessee | 17 | 32,609 | 383 |
| Texas | 4 | 9,626 | 94 |
| Virginia | 6 | 21,700 | 508 |
| Total | 134 | 562,433 | 9,651 |

We give the list of cotton factories in the State.

| Name of Company or Firm. | Location. | No. of Spindles. | No. of Looms. |
|---|---|---|---|
| J. W. Gray & Co. | Adairsville | 2,000 | 56 |
| Athens Mf'g Co. | Athens | 8,900 | 220 |
| Georgia Mf'g Co. | Athens | 6,000 | 120 |
| Princeton Factory | Athens | 3,280 | 100 |
| Atlanta Cotton Mills | Atlanta | 10,240 | 330 |
| Exposition Cotton Mills | Atlanta | 16,000 | 480 |
| Fulton Cot. Spinning Co. | Atlanta | 10.000 | 250 |
| Augusta Factory | Augusta | 26,000 | 800 |
| Enterprise Mf'g Co. | Augusta | 30,000 | 742 |
| Richmond Factory | Augusta | 2,200 | 40 |
| Globe Cotton Mills | Augusta | 4,850 | ... |
| J. P. King Mf'g Co. | Augusta | 26,464 | 760 |
| Riverside Mills | Augusta | 2,500 | ... |
| Shamrock Mills | Augusta | 2,500 | ... |
| Sibley Mf'g Co. | Augusta | 19,200 | 525 |
| Summerville Mills | Augusta | 4,000 | 150 |
| Sterling Cotton Mill | Augusta | 2,800 | ... |
| Early County Mf'g Co. | Blakely | 1,000 | ... |
| Hutcheson Mf'g Co. | Bowenville | 1,800 | ... |
| Cotton Factory Co. | Cedartown | Not complete | |
| Cotton Factory | Clarkesville | Not complete | |
| Anawaukee Factory | Chapel Hill | 800 | ... |
| Emma Anna Cot. Mills | Cochran | 1,200 | ... |
| Clegg Mf'g Co. | Columbus | ..... | 60 |
| Columbus Mf'g Co. | Columbus | 4,496 | 134 |
| Eagle & Phenix Mf'g Co | Columbus | 45,360 | 1,500 |
| Excelsior Cotton Mills | Columbus | ..... | 100 |
| Muscogee Mf'g Co. | Columbus | 5,000 | 258 |
| Steam Cotton Mills | Columbus | 3,000 | .. |
| Swift Mf'g Co. | Columbus | 6,000 | 200 |
| Covington Mills | Covington | 3,244 | ... |
| Sheffield Cotton Mills | Conyers | 500 | ... |
| Randolph Mf'g Co. | Cuthbert | 1,500 | ... |
| Pulaski Mf'g Co. | Hawkinsville | 1,080 | 48 |
| New High Shoals Mf'g Co | High Shoals | 5,500 | 80 |
| Bowell, Jewell & Co. | Jewells | 3,064 | ... |
| Troup Factory | La Grange | 1,500 | 48 |
| Bibb Mf'g Co. | Macon | 16,000 | 140 |
| Powell's Mills | Maxeys | 4,000 | .. |
| Wilcoxon Mf'g Co. | Newnan | 2,000 | ... |
| Hugh White | Newton Fact'y. | ..... | ... |
| Oglethorpe Mf'g Co. | Panola | 3,000 | ... |
| Shoal Creek Cot. Fact'y. | Parker Store | .... | ... |
| Cotton Factory | Peach-Stone Shoals | proposed | |
| Houston Factory | Perry | 2,080 | 60 |
| W. A. Brown & Son | Pleasant Grove | 264 | ... |
| Quitman Mills | Quitman | ..... | ... |
| Raccoon Mf'g Co | Raccoon Mill | 2,500 | 100 |
| Elmira Cotton Mills | Reynolds | 1,500 | 36 |
| Rome Cotton Factory | Rome | 1,500 | .. |
| Ostanaula Cotton Mills | Rome | proposed | |
| Roswell Mf'g Co. | Roswell | 1,500 | 128 |
| Wileo Cotton Mills | Roswell | 5,000 | ... |
| Andrew Campbell | Savannah | 8,096 | ... |
| Montour Factory | Sparta | 5,120 | ... |
| J. E. Stephen & Co. | Talking Rock | ..... | ... |
| Trion Mf'g Co. | Trion Factory | 8,456 | 258 |
| Flint River Factory | Thomaston | 3,000 | ... |
| Atherton & Fincher | Waleska | 576 | ... |
| Waynman Factory | Waynmanville | 3,500 | ... |
| Ala. & Georgia Mf'g Co. | West Point | 5,000 | 100 |
| West Point Mf'g Co. | West Point | 6,300 | 120 |
| Total, 62 mills | | 340,130 | 7,834 |

| | | | |
|---|---|---|---|
| New Mills | Dalton | Cost | $200,000 |
| New Mills | Griffin | Cost | 84,000 |
| Contemplated, Enlargement. | Rome | Cost | 100,000 |
| Building, (New) | Columbus | Cost | 700,000 |
| Enlargement Sibley | Augusta | Cost | 200,000 |
| Knitting Mill | Atlanta | Cost | 40,000 |
| | | | $1,324,000 |

Taking the statistics of flour milling, the largest single subject of manufacture, running in the South to an aggregate of $67,769,465 of products, Georgia stands second—Virginia leading with $12,649,276 of products, and Georgia coming next with $11,232,029, yet beating Virginia, in this, that with two millions less capital she made nearly as much product. Georgia had 1,132 flour mills, working $3,103,918 capital, and producing $11,232,029 of products. Georgia had the honor of producing one-sixth of the whole flour manufacture of the South.

Coming now to lumber, we find that the lumber production of the South ran in 1880 to $36,323,248, and in this powerful industry, as in cotton manufacture, Georgia stood first, leading the section.

She had 655 lumber mills, being exceeded in this respect of number by Virginia, North Carolina, Tennessee and Kentucky; but Georgia had larger capital and more products.

Her capital ran to $3,101,452, and her products to $4,875,310, while Virginia, Tennessee and Kentucky had about two millions of capital each, and did run to over three and a half millions of product.

Since 1880 Georgia has increased her capital in lumber mills three millions and her productions in proportion.

The lumber products in the South in 1880 was as follows:

| | Est. | Capital. | Products. |
|---|---|---|---|
| Alabama | 354 | $1,545,655 | $2,640,634 |
| Florida | 135 | 2,219,550 | 3,060,291 |
| Georgia | 655 | 3,101,452 | 4,875,310 |
| Kentucky | 668 | 2,229,558 | 4,064,360 |
| Louisiana | 174 | 803,950 | 1,764,640 |
| Mississippi | 295 | 922,955 | 1,920,355 |
| North Carolina | 774 | 1,743,217 | 2,682,795 |
| South Carolina | 420 | 1,056,265 | 2,031,507 |
| Tennessee | 755 | 1,004,503 | 3,744,905 |
| Texas | 317 | 1,660,952 | 3,773,449 |
| Virginia | 907 | 2,122,925 | 3,434,163 |
| West Virginia | 469 | 1,668,920 | 2,431,857 |
| | 5,923 | $21,240,902 | $36,323,248 |

Georgia's capital in lumber is to-day over $6,000,000, while the lumber production will exceed $7,000,000.

We thus see that in the leading three manufacturing industries of the South, Georgia, is indeed the Empire State, and in them is absolutely distancing her sisters.

In looking at the county manufactures in 1870, we see as follows:

| Counties. | Capital. | Products. |
|---|---|---|
| 1. Chatham | $1,148,075 | $2,805,771 |
| 2. Richmond | 1,315,145 | 2,614,405 |
| 3. Fulton | 434,560 | 2,000,995 |
| 4. Muscogee | 1,889,770 | 1,856,600 |
| 5. Bibb | 805,704 | 1,497,301 |
| 6. Floyd | 313,030 | 1,050,620 |
| 7. Clarke | 501,325 | 850,720 |
| 8. Cobb | 535,400 | 846,220 |
| 9. Glynn | 116,500 | 655,070 |
| 10. Taylor | 76,740 | 632,585 |

These were the leading 10 manufacturing counties in 1870.

In 1880 the 10 leading counties were as follows:

| Counties. | Capital | Products |
|---|---|---|
| 1. Fulton | $2,582,131 | $5,125,826 |
| 2. Richmond | 2,402,275 | 3,490,780 |
| 3. Chatham | 1,176,970 | 3,483,866 |
| 4. Muscogee | 2,456,374 | 3,019,300 |
| 5. Bibb | 657,800 | 1,724,125 |
| 6. Cobb | 537,133 | 1,383,322 |
| 7. Floyd | 512,005 | 1,104,376 |
| 8. Glynn | 868,000 | 755,785 |
| 9. Clarke | 568,400 | 629,933 |
| 10. McIntosh | 171,750 | 740,700 |

The contest is now between Richmond and Fulton. We thus see the changes in ten years. Fulton displaced Chatham and Richmond, and Richmond passed Chatham; Floyd has been left by Cobb and gone ahead of Clarke; Glynn went up one, taking Cobb's place, and Clarke fell back to Glynn's old place. The industries thus ran in 1880:

| | Est. | Products. | Capital. |
|---|---|---|---|
| Agricultural Implements | 20 | $ 601,935 | $ 200,124 |
| Bakery | 26 | 464,162 | 118,450 |
| Brick | 76 | 409,025 | 212,600 |
| Wagons | 59 | 552,581 | 275,300 |
| Confectionery | 14 | 335,335 | 130,700 |
| Cotton | 44 | 6,513,490 | 6,527,557 |
| Flour | 1,132 | 9,793,898 | 3,576,301 |
| Leather | 173 | 619,957 | 203,450 |
| Iron | 14 | 990,850 | 1,135,900 |
| Foundry | 39 | 1,299,491 | 916,510 |
| Lumber | 668 | 5,246,510 | 3,223,452 |
| Printing | 21 | 579,054 | 506,800 |
| Rice | 9 | 1,488,769 | 263,000 |
| Sash, etc | 14 | 366,000 | 760,500 |
| Meat Packing | 9 | 309,093 | 25,700 |
| Tar, etc | 84 | 1,445,739 | 513,885 |
| Tin | 56 | 329,624 | 155,350 |
| Others | 1,135 | 5,054,445 | 2,576,671 |
| | 3,593 | $36,440,948 | $20,672,440 |

It is not possible to give the full increase in our manufactures in Georgia since 1880, but we can approximate it.

Let us take the three counties with leading cities: The manufacturing capital has grown from 1880 to 1883 as follows:

| | 1880. | 1883. | Increase |
|---|---|---|---|
| Fulton | $2,468,450 | $5,971,130 | $3,502,674 |
| Richmond | 2,402,275 | 5,402,205 | 3,000,000 |
| Columbus | 2,456,371 | 5,364,100 | 2,907,728 |
| Total Increase | | | $9,410,402 |

We thus have in three counties a growth of manufacturing capital of $9,410,402. The BALTIMORE MANUFACTURERS' RECORD gave the enlargement of capital in the whole State of Georgia in the six months from January 1st, 1883, to June 30th, 1884, as $3,759,000.

Taking those facts as a basis of calculation we may reasonably estimate as follows as to manufacturing capital.

| | |
|---|---|
| Increase Fulton, Richmond and Muscogee, 1880 to 1884 | $ 9,410,402 |
| Increase in rest of State to 1884 | 5,000,000 |
| Increase in State January to July 1884 | 3,759,000 |
| Increase since 1880 | $ 19,169,402 |
| Manufacturing Capital in 1880 | 36,440,948 |
| Increase since 1880 | 19,169,402 |
| Present Manufacturing Capital | $ 55,610,350 |

Increase in less than five years, 50 per cent.

This is a very complimentary exhibit for our great State, and demonstrates a solid and versatile manufacturing advancement.

THE trade issue of the Augusta, Ga., *Chronicle and Constitutionalist* is a magnificent paper, the finest we think without exception ever issued south of Maryland. The cover is a splendid piece of lithographing, representing cotton, and in keeping with this, the illustrations, the quality of paper, and the presswork, are all as near perfect as could be desired. This issue is a fine exponent, not only of the progress of Augusta, but of the whole State of Georgia, and bristles with facts and figures of great interest, compiled especially for the *Chronicle* by Col. Avery, whose excellent articles on Southern progress in our columns have made him well known to the readers of the MANUFACTURERS' RECORD. The publishers of our most excellent cotemporary are to be congratulated upon this splendid edition.

# CONSTRUCTION DEPARTMENT.

**WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.**

ALABAMA.

A cotton compress will probably be erected in Anniston, Ala.

M. E. Ezzell will open a carriage and wagon shop at Anniston, Ala.

Jas. A. Carney, Carney, Ala., has contracted for planing mill.

FLORIDA.

A factory for manufacturing palmetto into fibre for brushes has been nearly completed in Sandford, Fla.

Lake City, Fla., is to have a wagon factory.

L. O. Gold has contracted to construct 30 miles of road for the Florida Southern Railroad.

GEORGIA.

Evertt & Boyles, of Hamilton, N. C., will build an extensive cypress saw mill near Darien, Ga.

Elias May & Co., Atlanta, Ga., will build a paper bag factory.

Abbott, Haas, and others, Atlanta, Ga., have established a factory for making looms, spindles, &c.

The Furman Farm Improvement Co., of Atlanta, Ga., previously reported, are spending about $60,000 in enlarging their works.

The Sale Gold Mine, near Lincolnton, Lincoln county, Ga., will be extensively worked by its new owners, as previously reported.

Dalton, Ga., is discussing the building of water works.

KENTUCKY.

The Chattanooga Spoke Factory, previously mentioned as negotiating with a view of moving to Lexington, Ky., have decided to do so.

Frankfort, Ky., has contracted for water works.

The Watson Bottle Co., capital $50,000, has been incorporated in Louisville, Ky., to manufacture bottles.

The new flour mill at Lexington, Ky., has been completed.

Frank S. Beaumont, Pembroke, Ky., will put up a large tobacco factory.

LOUISIANA.

The State Board of Education, of Louisiana, will build a normal school at Natchitoches.

The Mississippi Valley Railroad will soon erect a passenger depot at New Orleans.

The New Orleans Rapid Transit Railway Co., capital $150,000, has been incorporated in New Orleans by Henry Shaw and others.

MARYLAND.

It is probable that a stock company will be organized in Easton, Md., to build water works. Wm. E. Bartlett, Jr., can give particulars.

J. J. Buck, Port Deposit, Md., will build a saw mill.

Wm. S. Dutterea, of Ladiesburg, Md., is enlarging his tannery.

James H. Gambrill, of Frederick, Md., will enlarge his flour mill, and put in new process machinery.

The Vernon Mining Co., Baltimore, capital $500,000, has increased its capital stock to $1,000,000.

NORTH CAROLINA.

Sparger Bros., Mt. Airy, N. C., are building a tobacco factory.

Cozart & Hunley, Oxford, N. C., will build machine shops.

Stilley Bros., Washington, N.C., will erect a saw mill.

Tinch & Welborn, Lexington, N. C., are building a flour mill.

Tobacco factories are now being built in Reidsville, N. C., by Johnston Brothers, Harris Brothers, H. H. Reid, W. Lindsey, and Frank Hall. Z. Motley and Watt Brothers also contemplate building.

O. M. Beatty, of Concord, N. C., promises to build a $100,000 industrial school at Charlotte, N. C., and has purchased the ground for it.

SOUTH CAROLINA.

A harness and saddle factory will be started in the State penitentiary, Columbia, S. C., by Mr. Evans.

TENNESSEE.

The North and East Nashville Street Railroad expect to commence laying track soon.

John R. Richards, Poplar Creek, Tenn., will work a new coal mine.

Frank Watts, Coopertown, Tenn., will build a saw and grist mill.

Mark Johnson, Ridge Top, Robertson county, Tenn., will erect a large stave factory.

Charles Ross, of Knoxville, Tenn., has been putting additional machinery into the Coes Creek Gold Mines.

TEXAS.

The Cleburne Water Works Co., capital $50,000, has been incorporated at Cleburne, Texas, to construct water works.

A new water works company is being organized in Austin, Texas.

Swerney & Skeen have completed their machine shops at Colorado, Texas.

The Houston Rolling Mill, Houston, Texas, is meeting with much success already, and when finished will turn out railroad rails and all kinds of merchant iron.

A boiler in the mill of Edward Moier, Fredericksburg, Texas, exploded Oct. 1, doing much damage; loss reported at $25,000.

Beaumont, Texas, is again discussing water works. J. L. Williams can furnish particulars.

Marshall, Texas, is still discussing water works project.

VIRGINIA.

Gravely & Co., Martinsville, Va., have built a foundry and machine shop.

The Craig State Company, Abbott, Va., are opening up their big slate mines.

It is reported that the Whitehead & Massi Tin Mine, near Amherst, Va., has been sold to Philadelphia capitalists for $300,000.

WEST VIRGINIA.

A handle factory is being erected in Guyandotte, W. Va.

Robert Ballard, of Charleston, W. Va., is preparing to mine coal on Cabin Creek.

The Baltimore & Ohio Railroad, will build new round house and machine shop at Wheeling, W. Va.

The Brooke Gas Company, capital $450,000, has been incorporated in Wheeling, W. Va., by John H. Hobbs, C. W. Brockunier and others, to bore for gas, oil, &c., pipe the same, &c.

BURNED.

Saw mill of G. C. Waddill, near Waverly Station, Miss., V. S. & P. Railroad. Loss $10,000.

Grist mill and gin of Ella Reid, Shubuta, Ala. Loss $1,500.

Jones Bros' woolen mill, Bolivar, Tenn. Loss $6,500.

A. J. Weldon's shingle mill at Paris, Henry county, Tenn. Loss $11,000.

Skinner & McDavid's saw mill, near Ferry Pass, Escambia county, Fla. Loss $40,000.

The Portsmouth Iron Works, Portsmouth, Va.

Planing mill of W. A. Robinson, Longview, Texas. Loss $24,000.

The Principio Iron Furnace, Principio, Md., was damaged by fire Oct. 3.

Saw and planing mill of T. V. Rishell, Alexandria, Va. Loss $10,000.

Machine shops of the North Eastern Railroad, Meridian, Miss. Loss $100 000.

## MANUFACTURING.

MESSRS. JACKSON & TYLER are working on specialties manufactured by them, such as gear cutting machines, emory grinders, wood lathes, bow cutters, &c., for their proposed display at the world's exposition, New Orleans.

MR. PHILIP R. VOGEL, dealer in brass goods, notices a change in his business for the better, orders having come in quite liberally from the city and all parts of the South.

MESSRS R. M. SPEDDEN & CO., S. Broadway, have no large contracts on hand, but have a full amount of miscellaneous repairs for parties in the city. They expect a fine fall trade.

MESSRS. HIRSHBERG, HOLLANDER & CO., dealers in paints, oils, &c., W. Pratt street, have more orders on their books than they have had for months, and they report the outlook very encouraging.

MESSRS. H. BALDERSTON & SON, manufacturers of wire railing, say they have more orders than they can supply for two months, and orders are still coming in very liberally.

MESSRS. JOHN T. COLEMAN & SONS, manufacturers of boilers, N. Holliday street, have orders to complete for a supply of small and large boilers to supply immediate orders. They are also engaged at work on boilers for stock.

## Cincinnati Iron Market Report.

Specially reported by E. L. HARPER & CO.

CINCINNATI, October 6, 1884.

During the past week some large consumers, satisfied with prices obtainable, have purchased for early future deliveries. Aside from this fact no change in the elements and condition of the trade has transpired since our last report. We quote as follows:

| FOUNDRY. | Four Months. |
|---|---|
| Hanging Rock Charcoal, No. 1 | $21 00@22 50 |
| " " " " 2 | 20 00@21 50 |
| Strong Neutral Coke, " 1 | 17 00@18 00 |
| " " " " 2 | 16 00@17 00 |
| American Scotch, " 1 | 17 00@18 00 |
| GREY FORGE. | |
| Neutral Coke | 15 50@16 00 |
| Cold Short | 15 00@15 50 |
| CAR WHEEL AND MALLEABLE. | |
| Hanging Rock, strictly cold blast | 26 00@26 50 |
| " " " warm " | 22 50@23 00 |
| Lake Superior Charcoal, all grades | 23 00@24 00 |
| South. Car Wheel, strictly cold blast | 24 00@25 00 |
| Amherst and Virginia Warm Blast | 21 25@21 75 |

M. L. MEACHAM, Memphis, Tenn., is putting in a Clem & Morse elevator.

IT is not often that ladies engage in railroad and manufacturing enterprises, but there are exceptions to nearly all rules. Miss Maude St. Pierre, whose name has quite often appeared in print in connection with the purchase of Southern mineral lands, claims to control 138,000 acres of mineral and timber land in Kentucky ane Tennessee. She has mapped out plans for the most extensive development of this property, such as railroad building, coal and iron ore making, erection of blast furnaces, large colonizing schemes, &c. Miss St. Pierre is of Louisiana birth, though much of her life has been spent abroad. While she is accorded high praise by Southern papers for her beauty, education, busines knowledge, &c., her multitudinous schemes look somewhat visionary, possiby because we are not accustomed to seeing a woman undertake so much.

A WHEELING, W. VA., gentleman in an interview with a reporter of the Pittsburgh Dispatch, said: "I don't see any market for the steel nail. They have been endeavoring to get it a foothold among contractors and dealers for some time, but the carpenters still insist on the iron nail, and the steel product lies piled up in the warehouses. Why, to-day the Bellaire nail mill has their warehouse packed to the roof, and I am told have considerable trouble in disposing of their stock. I tell you I cannot see any future for the steel nail. They have not solved the problem of how much carbon the steel should contain. I don't think they ever will. If they make the steel hard enough so the nail will drive into hard wood, the head flies off in the driving. If soft enough so that the head will not fly off the nail will not drive, but duoble up. Leaving this objection out, what advantage is it to the manufacturer to produce steel nails? They say because the steel nail can be produced cheaper. Nails are now selling at $2 per keg. How much cheaper can they sell them? Say they come down to $1.75. Who gets the benefit of the cheap nails? If you go to the grocery store you pay 5 cents per pound. The manufacturer sells to dealers, who in turn sell them out to retail men and contractors. The man that builds a house to-day does not get any more advantages with nails at $2 per keg than when they sold at $3.50 and $4.

A DISPATCH from Chattanooga, Tenn., says: "The iron interest is reviving in the South. The Woodstock Iron Company, Ala., has just closed a contract for 13,000 tons of car-wheel iron at $20.50 per ton. This is the largest order placed in the South since the depression began. Reports from other furnaces indicate increased inquiry for iron."

LOCKWOOD, GREENE & CO.

MILL ENGINEERS

Office, 65 Westminster St., Providence, R. I.

Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old.

## Lathes, Drill Presses and Chucks.

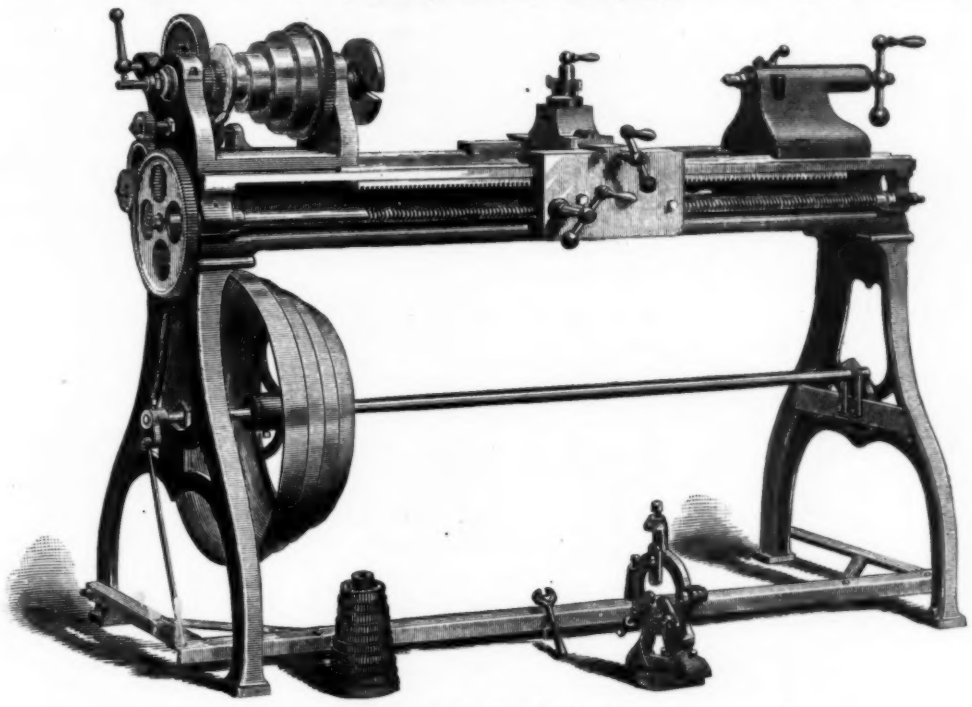
Messrs. Sebastian, May & Co., Nos. 185 and 187 W. Pearl street, Cincinnati, O., began business about the first of last July. Though this firm is only three months old they have succeeded in getting up a fair sized boom by the excellence of the work they turn out. The members of the firm are men of long experience in their line of business and are practical men.

The secret of their success lies in the fact that they employ first-class mechanics, and examine personally every machine before it leaves their factory. And they offer to send any of their lathes on trial. Buyers can thus test for themselves and if not satisfied return it and order from some one else. They have had none returned yet.

They make four sizes: a small one,—bed 4½ inches wide, 34 inches long with four V's, price $60.00; three larger sizes, prices, 14x40 inches between centers, $175.00; 14x52 inches, $185.00; 14x64 inches, $195.00.

The lathe as shown in the cut is the second size.

The firm publishes a neat catalogue, which will be sent upon application. They also manufacture drill presses, chucks, drills and machinists' supplies.



SEBASTIAN, MAY & CO.'S LATHE.

THE Clayton Air Compressor Works, located near the Brooklyn Bridge, Brooklyn, N. Y., have lately shipped several car loads of mining and tunneling machinery to the West, comprising the Clayton Improved Air Compressor, rock drills, duplex water pumps, for mining, drainage, steam boilers, pipe, drill steel, &c. Among the mines which have recently added the Clayton Air Compressors to their plants are the Big Bend Tunnel and Mining Co. and the Fresno Enterprise Co. of California, and the Copper Queen Mining Co. and the Tombstone Mining and Milling Co., of Arizona. A number of orders for large size compressors are booked, and business prospects for this fall are reported as excellent.

THE BALTIMORE MANUFACTURER'S RECORD still maintains the high editoral and typographical standard which has placed it so firmly in the front rank of the trade journals of the country.—*North and South*, Buffalo, N. Y.

☞ *If you are not already a subscriber to the* BALTIMORE MANUFACTURERS' RECORD, *send us* $3 *and you will receive it regularly for one year or six months for* $1.50.

## Automatic Can Trimmer and Cutter.

The cut herewith presented to our readers represents a new and valuable machine recently brought out by Mr. E. W. Bliss, 17 Adams street, Brooklyn, New York, for trimming the edges and slitting tin plate into can bodies of any required size.

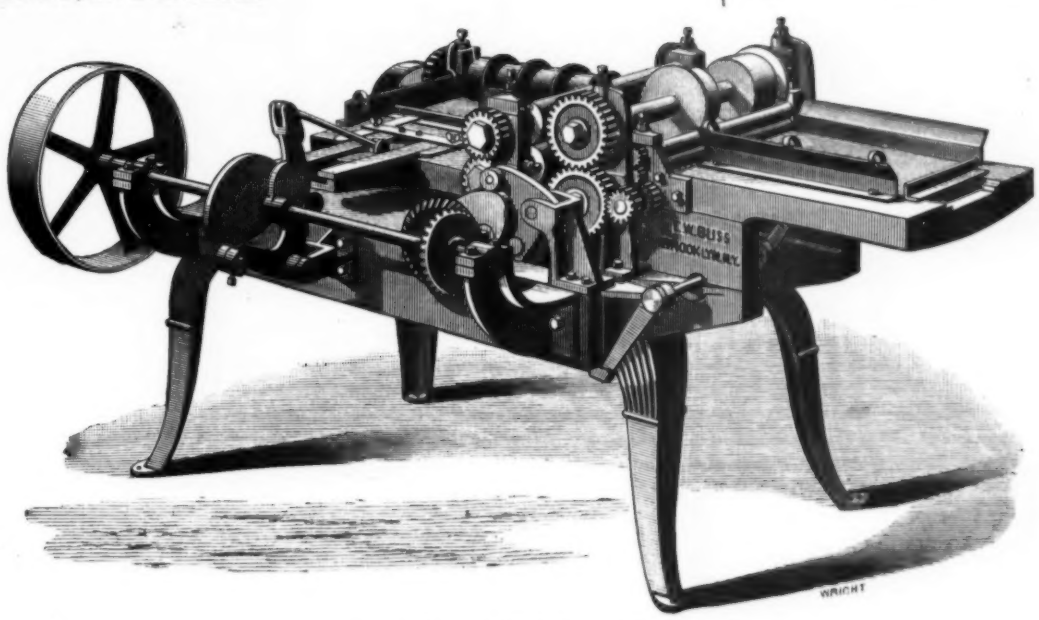
The rapidly increasing demand in the use of tin plate in constructing tin, spice, baking powder boxes, fruit cans, shingles, and various other forms to which tin is adapted, renders any machine which cheapens the cost of production of special interest to those engaged in the business.

Formerly the manufacturers of cans and similar articles, trimmed and cut the sheet of tin by the slow and tedious process of a squaring shear, operated by hand or power, requiring more or less operations, consuming time and largely increasing the expense of the manufactured goods.

Heretofore various attempts, accompanied with indifferent success, have been made to produce a machine that would trim and slit the plate into the required size with speed and accuracy.

Mr. Bliss, in designing and constructing the machine illustrated, may justly be regarded as the first to achieve success in this field. We are assured by him that this machine will easily trim and slit 40 sheets of tin per minute into any ordinary sizes required. The operator places the sheet on the extension table shown on the right of the cut, the slide then moves forward, bringing the sheet between circular revolving cutters, rotating in opposite direction, which draw the sheet between the cutters, trimming the opposite edges, and at the same time slitting the sheet into the required width. The sheet thus trimmed and slit passes by means of an automatic feed motion at right angles from the first cutters, carrying the sheet between the revolving cutters, rotated in opposite directions, and set at right angles with the first cutters, trimming and cross slitting the sheet in an opposite direction. The machine, as regularly made, will work 14x14 inches, 14x20 inches, and 20x20 inches. Both gangs of cutters are adjustable to trim and slit sheets into flanks of any required size.

This machine must prove of great value to those engaged in manufacturing cans, and is justly entitled to rank among the first labor-saving machines in this trade. This is the first of a series of machines designed and constructed by Mr. Bliss, specially adapted for automatically forming and constructing fruit cans.




AUTOMATIC CAN TRIMMER AND CUTTER.

PERSONS going to Cincinnati, either on business or pleasure, are advised to stop at the Palace Hotel. It is convenient to the business section of the city, as well as to all points of interest and places of amusement. The cars of nearly every prominent street car line pass its doors, or within a short distance of it. It is a new hotel, splendidly furnished, and provided with every convenience for the comfort of its guests. Its rates are as low as those of any other first-class hotel. Location, cor. Sixth and Vine streets.

THE success of the Babcock & Wilcox Water Tube Boilers using blast furnace waste gas as fuel at the Lucy Furnaces, Pittsburg, Pa., is leading to other trade in this direction. Sales have recently been made to blast furnaces as follows:

| | H. P. |
|---|---|
| Pottsville Iron and Steel Co., Pottsville, Pa. | 150 |
| Woodward Iron Co., Wheeling, Ala. | 292 |
| McCormick & Co., Harrisburg, Pa., Paxton Furnaces | 416 |
| Lochiel Rolling Mill Co., Harrisburg, Pa. | 416 |
| Total | 1,274 |

The following is a list of other sales made by the Babcock & Wilcox Co. within the last sixty days:

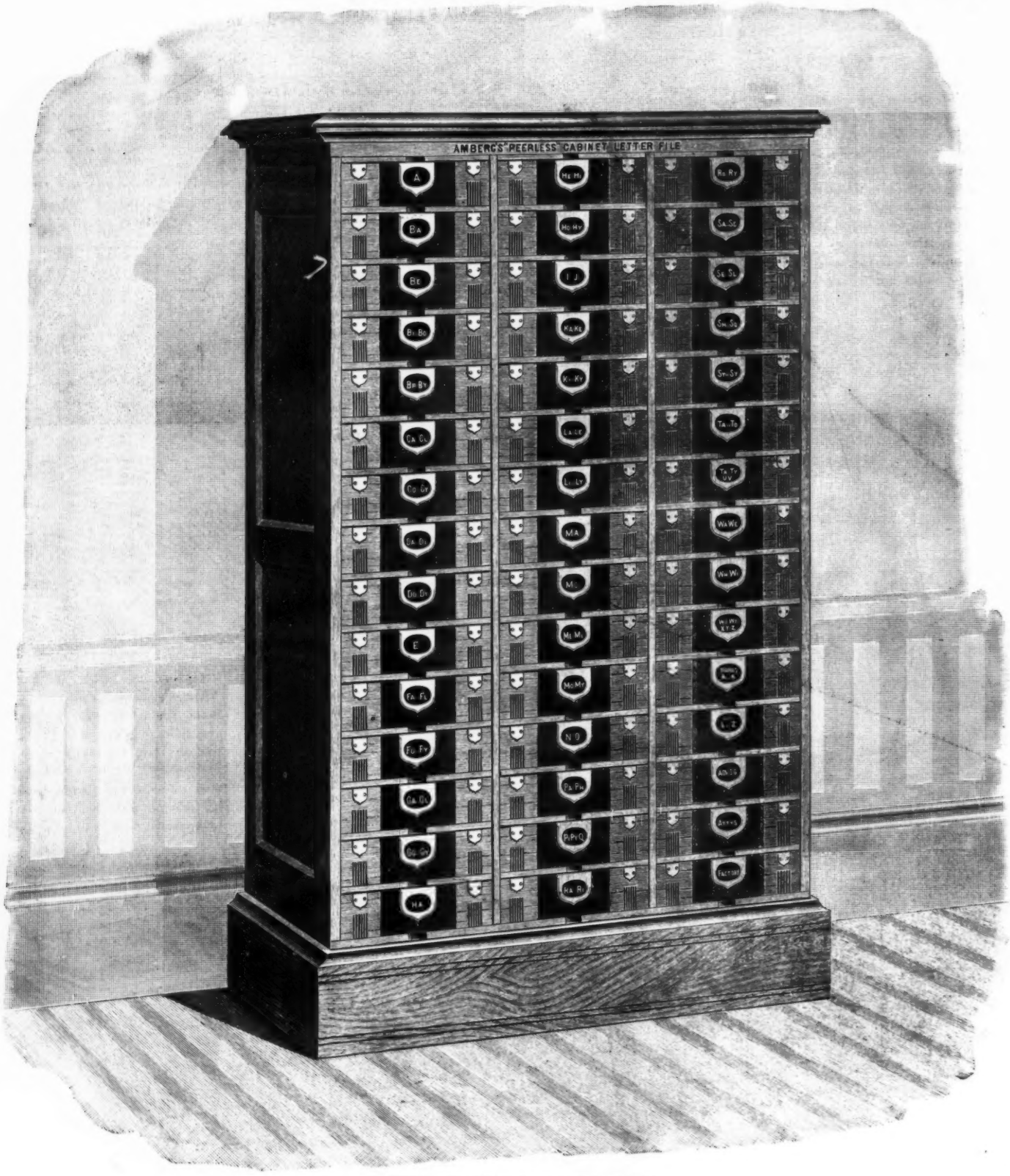
| | H. P. |
|---|---|
| H. I. Kimball House Co., Atlanta, Ga. | 122 |
| Woodland Fire Brick Co., Woodland, Clearfield county, Pa. | 92 |
| Cincinnati, St. Louis & Pittsburg Railroad, Indianapolis, Ind. | 146 |
| Louisiana Sugar Refinery Co., New Orleans, La. | 240 |
| Williamsburgh Gas Light Co., Brooklyn, E. D. | 164 |
| Pratt Manufacturing Co., Brooklyn, E. D. | 208 |
| Colwell Bros., N. Y. City, for export to Mexico. | 122 |
| New Orleans Cotton Exposition, New Orleans, La. | 656 |
| Leonard Bros., Plymouth, Pa. | 15 |
| G. Reynaud, N. Y. city, for Ingo Santa Maria, Cuba | 73 |
| Ohio Edison Electric Installation Co., for Middletown, Ohio | 92 |
| Oliver & Roberts Wire Co., Pittsburg, Pa. | 416 |
| McCormick Harvesting Machine Co., Chicago, Ill. | 480 |
| Sperry Electric Light Co., Omaha, Neb. | 120 |
| Walter Aiken, Franklin Falls, N. H. | 30 |
| A. H. McNeal, Burlington, N. J. | 104 |
| Lombard, Ayres & Co., Constable Hook, N. J. | 208 |
| Susquehanna Water Power and Paper Co., Conowingo, Md. | 164 |
| Brooklyn Sugar Refining Co., Brooklyn, E. D. | 1,464 |
| American Bank Note Co., New York city | 240 |
| U. S. Naval Training Station, Newport, R. I. | 122 |
| | 5,276 |

RECAPITULATION.

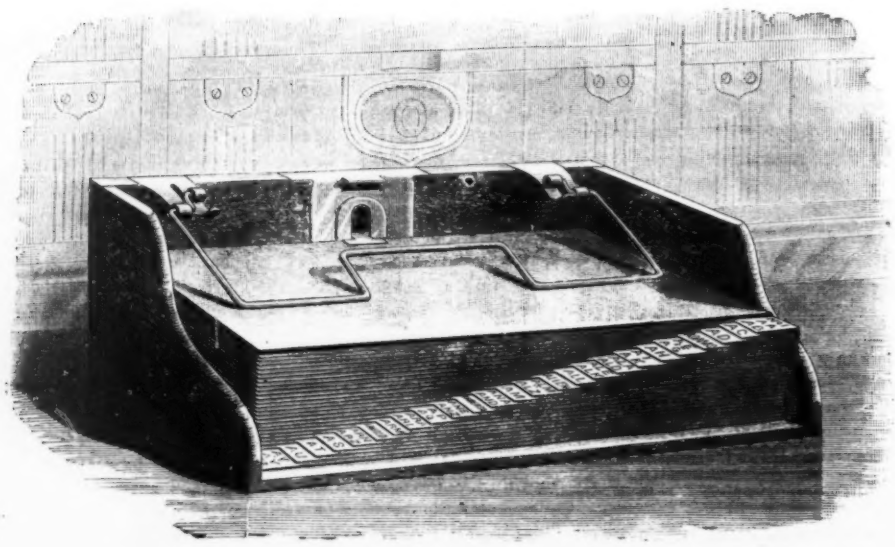
| | H. P. |
|---|---|
| Blast furnace sales | 1,274 |
| Other sales | 5,278 |
| Total | 6,552 |

*Graham, N. C.*, Sept. 25, 1884.—Here in Alamance county, as in other sections of the State, the drought has cut short the corn crop more than one-third. The wheat crop was very large, perhaps a third larger than any preceding crop. Tobacco is the best money crop we have in this county; that, too, has suffered severely by the drouth, but it is being well cured. In north Alamance it has been raised for many years, but in the south part of the county it is a new industry and very much in favor. Our business men expect trade to be better soon; they say it is already getting better. Of the fourteen cotton mills in the county, not more than three or four are running on full time. We have four smoking tobacco factories; their orders are getting active. A general revival of business and healthy reaction is anticipated. —J. D. KENODLE, Editor Gleaner.

THE city of Durango, Col., has contracted with the Curtis Regulator Co., of Boston, for a 10 inch street main pressure regulator, to reduce their reservoir pressure of 160 lbs. to 80 or 100 lbs., as may be desired. The regulator is so constructed that the fire pressure may be put on instantly at will.




AMBERG'S "PEERLESS" CABINET LETTER-FILE.



SAMPLE DRAWERS IN THE AMBERG LETTER FILE.

## Amberg's Cabinet Letter File.

The time has now come when a cabinet letter file has become as much a necessity to a business man as the office desk, safe or copying book.

In this age of fast mails, telegraphs, typewriters, &c., it is necessary for an enterprising business man, if he wishes to keep pace with the progress that is going on, to adopt the most expeditious means of dispatching business.

The new system of filing letters, invoices, circulars, &c., of which W. A. Amberg, of Chicago, is the inventor, supplies a want that the business public has not been slow to recognize, and while the value of this useful article is becoming better understood the sales of it are steadily increasing.

Briefly enumerated, some of the advantages claimed for the Amberg's Cabinet Letter File are:

1. Folding, endorsing, binding, numbering, posting and indexing, are all dispensed with; the mere act of putting away a letter does more than all these.

2. So many indexed division exist that the letters of each correspondent are practically isolated from the rest, consequently few papers need be handled when a particular one is wanted.

3. Papers are kept free from dust and mutilation, cannot be filed in the wrong file, and are instantly found when wanted.

4. A letter five years old, filed by this system, can be as readily and certainly found as if received within thirty days, and in almost the same time.

5. A system of indexing guaranted perfect, original with the inventor of the Amberg File, and unapproachable by any other computation in simplicity, accuracy, detail and magnitude. Nothing guessed at,—all perfected by years of study and actual experience. Imitated by many, yet superior to all.

6. A handsome durable article, substantially made, the wood-work being of the best seasoned walnut, and the metal parts of brass, steel, and nickel plated; improved time and again, tested by experienc , perfected in every part, and worth many times its cost.

We think one of the best evidences of the value of this useful article is its great success. There is no part of the civilized globe where Amberg's Cabinet Letter File is not in use. In our own country they have sold over 8,000.

They have a house in London; also one in New York city. The principal house is in Chicago. The firm issues an elegant illustrated catalogue; the work done in the printing deparment of the main house in Chicago. This will be sent upon application.

## List of Patents.

The following Patents were granted to citizens of the Southern States, bearing date Sept. 30, 1884. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

Chilton, Wm., Hempstead, Texas. Motor...305,792
Crowther, R. F., Baltimore, Md. Dental impression-cup...305,900
Daugherty, Geo. and S. Thomas, Letart, W. Va. Horse detacher...305,746
Davis, N. H., Greenville, S. C. Combine cotton seed planter and fertilizer distributer..305,804
Gregg, T. E., Mineral Springs, S. C. Vehicle axle...305,810
Hamblin, J. M., South Union, Ky. Mowing machine knife...305,813
Johnston, J. W., Richmond, Va., and J. H. Rogers, Washington, D. C. Safe...305,018
Lawrence, J. A., Sherman, Texas. Churn power...306,022
Long, C. W., Louisville, Ky. Telephone transmitter...306,026
McCurdy, T. B., Lancaster, Texas. Vehicle top...305,832
Nadorff, Henry, Louisville, Ky. Beer cooler.305,592
Peterson, P. A., Handsome Depot, Va. Coffee roaster...305,959
Pierson, R. M., Mayesville, S. C. Nut for carriage axles...305,843
Salter, J. R., Quitman, Ga. Cultivator...305,851
Sell, E. E., Charleston, S. C. Velocipede....305,968
Smith, W. F. and W. W. Adams, Ozark, Ark. Cotton-gin breast...306,035
Stevenson, J. E. and J. Forsyth, Brighton, Tenn. Horse detacher...305,858
Turner, E. M., Knoxville, Tenn. Pump.....305,982
Wagner, M. M., Baltimore, Md. Combined bureau and bedstead...305,985
Wagner, M. M., Baltimore, Md. Combined folding bedstead and table...305,986
Watson, J. E., Louisville, Ky. Attachment to prevent the refilling of bottles...305,870
Watson, J. E., Louisville, Ky. Bottle and attachment to prevent its being refilled.....305,988
Williams, Jeremiah, Hartford, Ky. Lime throwing gum...305,873
Wofford, H. C and L. A. McCord, Clinton, S. C. Vermin destroyer...306,041

AMONG the prominent hotels of the country must be noted The Palace at Cincinnati, Ohio. It is a magnificent stone structure recently built, superbly finished and furnished throughout, and provided with modern devices for the comfort and convenience of guests. It is under efficient management, and possesses the advantages of a hotel, with the comforts of a home. The proprietor gives personal supervision to all the details of management, and is careful to see that his guests have their wants properly attended to. ‡

## Literary Notices.

The "Directory of Lumber Mills and Lumber Dealers in the United States and Canada," published by Rand, McNally & Co., of Chicago, Illinois, is now ready for delivery. The book is an octavo of 800 pages, neatly bound in cloth, containing about 50,000 names, giving a complete list of Pine Saw Mills, Hardwood Saw Mills, Stave Mills, Shingle Mills, Planing Mills, Sash, Door and Blind Factories and Lumber Dealers, (Hardwood, Pine and general) in the United States and Canada, and plainly distinguishes one class of the trade from another.

The work also embraces the laws for material-men, and a digest of the Statutes affecting lumbermen and lumbering.

The name of the railroad and express to every city or town wherein above interest are located is also given, together with a map of each State, Territory and Province in colors, making the work a shipping guide as well as a directory.

The compilation of the book occupied ten months of time at the expense of $20,000, and is as near complete as a work of that magnitude can be.

The publishers deserve considerable praise in placin- before the lumber trade and the interests that are tributary to it a work so comprehensive, and we do not hesitate in saying that all interested should give it their support by sending for a copy. Price $5.00.

A CORRESPONDENT at Salem, N. C., writes: The "Salem Iron Works" of this place, already one of the most complete shops and foundries in the South, is now adding a fine smith and boiler shop, which is to be fitted up in the most complete manner. Several varieties of engines of a superior quality and finish have been built by this establishment since the beginning of the present year, the boilers for which have been procured elsewhere. It is now the purpose of Mr. Hege, the proprietor, to build his own boilers. His plan is to furnish shops and materials, and have the work done by contract with some reliable party. As there is no boiler shop in North Carolina this is a good opening for some live man.

## Important to Southerners.

Persons arriving in New York via Cortlandt Street Ferry, by taking the 6th Avenue Elevated Train, corner Church and Cortlandt streets, can reach the Grand Union Hotel in 42d street, opposite Grand Central Depot, in twenty minutes, and save $3 carriage hire. If en route to Saratoga or other summer resorts via Grand Central Depot, all baggage will be transferred from hotel to this depot free. 600 elegantly furnished rooms $1 and upwards per day. Restaurant the best and cheapest in the city. Families can live better for less money at this hotel than at any other first-class hotel in the city. ‡

CORRESPONDENCE relating to the manufacturing, mining, lumbering and all other material interests of the Southern States is solicited. We invite those interested in the development of the South to make free use of our columns. Reaching so many capitalists in all parts of the United States seeking profitable investment in the South, the MANUFACTURERS' RECORD offers an excellent chance for the people in that section to place the advantages of each locality before those likely to be interested. We will take great pleasure at all times in telling what has already been accomplished in the South, and showing up the opportunities of doing still more,—so if you desire to attract immigration or capital, or if you know of an opening for profitable investment in manufacturing, mining or kindred pursuits, write us an account of it. It will be published free of cost.

# THE MARKETS.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, Oct. 6, 1884.

There are some signs of improvement in trade circles, and it is believed that considerable activity may be looked for after the Presidential election is out of the way. A dispatch from Chattanooga, Tenn., says: "The iron interests are reviving in the South. To-day the Woodstock Iron Company, of Ala., closed a contract for 13,000 tons of car-wheel iron at $20.50, the largest single order placed in the South since the depression began. Reports from different furnaces indicate a better inquiry." Reports from all parts of the South generally give promise of a very fair fall and winter trade, with good prospects for much activity in industrial matters.

The manufactured iron market has been fairly active, but at close figures. We quote as follows, viz:

| | | |
|---|---|---|
| Ref. Bar Iron, 1 to 6x⅜ to 1 | ₩ lb. | 1.90@ 2 c |
| " " 1 to 4½x1⅛ to 1 | " | 1.90@ 2 c |
| " " ¾ to 2, round and square | " | 1.90@ 2 c |
| Hoop Iron, 1½ wide and upward | " | 2.80@ 3 c |
| Band Iron, from 1½ to 6 in wide | " | 2½@ 2.60 |
| Horseshoe Iron | " | 3.20@ 3.30 |
| Norway Nail Rods | " | 5 @ 5¼c |
| Black Diamond Cast Steel | " | 10 @ 11 c |
| Machinery Steel | " | 4¼@ 4¾c |
| Spring Steel | " | 3½@ 4 c |
| Common Horse Nails | " | 10 @ 11 c |
| Railroad Spikes, 5½x9-16 | " | 2.50@ 2.60 |

The demand for pig iron continues moderately fair, with prices as last quoted, viz:

| | |
|---|---|
| Baltimore Charcoal Wheel Iron (all Baltimore ore) | $28 00@29 00 |
| Virginia C B. Charcoal Wheel Iron | 28 00@— — |
| Anthracite, No. 1 | 21 00@23 00 |
| " " 2 | 20 00@21 00 |
| " " 3 | 18 00@20 00 |
| " Mottled and White | 16 00@17 00 |

# HARDWARE.

The fall trade thus far has hardly been up to early expectations, but still the volume of business is pretty large, with good prospects for more activity after the cotton crop begins to move freely. Prices are so low that dealers are inclined to think that no further reduction is to be looked for.

Nails continue weak, with prices quoted at from $2.00 to $2.10 according to quality, although it is possible a shading might be obtained from these figures on the lower grades at least.

The demand for the Walker Horse Shoes made in this city is still very active.

# Philadelphia Iron Market.

PHILADELPHIA, Oct. 6, 1884.

There has been a little more activity in pig iron during the past few days, but it is not likely to last, and prices have shown no improvement. Consumers are doing very little, and therefore require very little crude material. Prices are quoted as usual at $19 to $20 for No. 1 foundry; $18 to $18.50 for No. 2; and $16.50 to $17.50 for Grey Forge, with a tendency toward the lower price for all except the very best makes of iron. There is nothing doing in foreign material, which is quoted nominally at $19 for Bessemer, $26.50 for 20 per cent. spiegeleisen, and $72.50 for 75 per cent. ferro manganese. The structural iron mills are working along as usual, but only taking small orders. The bar mills are receiving very little new business. Plate and tank are being bought in small lots, and very few of the mills are busy. Steel rails have improved further, and companies represented here state that $30 is their price for small lots, and express the opinion that prices will soon improve to $32, but no large orders are being placed at these figures. Should the campaign end in victory to protection, there is a large amount of railroad work that would be immediately placed, but large orders are being held back until the outcome is known. Some sanguine steel rail makers are looking forward to $35 as the ruling price next year, but no such limit is likely to be reached.

Nails are dull at $2.10; old rails are firm and moderately active in small lots at $18 to $19.50, according to quality and size of order.

The anthracite mines are at work this week. Stocks at tidewater are large. Demand is active in the city trade. The line trade is not yet active, and western shipments remain light for the season. Vessels are in large supply at Port Richmond, and stocks are 80,000 tons. The bituminous trade is very dull and uninteresting.

# Cincinnati Iron Market Report.

Specially reported by ROGERS, BROWN & Co., Pig Iron Commission.

CINCINNATI, Oct. 6, 1884.

Reports of the iron market from different points in the West vary in tone. Some speak of dullness greater than has been experienced, but most indicate a more or less pronounced improvement. The aggregate, as felt at the selling centers, is to create an improved tone. The volume of business is unquestionably very much larger than a few weeks ago, and with the tendency toward restricted production, furnaces naturally begin to feel themselves in a stronger position. Sales are made now in round lots at 25 and 50 cts. per ton advance over figures prevailing a month ago. Several large orders have been placed during the last week and not one that we are aware of at any concession. There is still abundant complaint of dullness among the foundries and rolling mills, and it is not believed that any material improvement will be felt until after the election. Both sellers and consumers seem to be generally agreed that the absolute and final bottom in prices has been reached and passed, and that whatever change there may be from this time on will be toward improvement. We quote for cash f. o. b. cars Cincinnati:

HOT-BLAST FOUNDRY.

| | |
|---|---|
| Hanging Rock C. C., No. 1 | $21 00@23 00 |
| " " " " 2 | 19 00@21 00 |
| Southern " " 1 | 19 50@20 00 |
| Strong Coke, " 1 | 17 75@18 00 |
| " " " 2 | 16 50@17 25 |
| " " " 3 | 16 00@16 75 |
| Soft Stone Coal, " 1 | 18 50@19 25 |
| " " " 2 | 17 00@17 25 |

FORGE.

| | |
|---|---|
| Strong Neutral, No. 1 Mill | $15 00@15 50 |
| Cold Short. " 1 Mill | 14 50@15 00 |

CAR WHEEL AND MALLEABLE.

| | |
|---|---|
| Hanging Rock C. B. | 30 00@31 00 |
| " " W. B. | 20 00@24 00 |
| Southern Car-Wheel Iron | 24 50@26 00 |
| Lake Superior " " | 23 00@24 50 |
| " " Malleable | 24 50@25 50 |

# Louisville Iron Market.

Specially reported by GEO. H. HULL & Co., Commission Merchants for the sale of Hot and Cold Blast Pig Iron.

LOUISVILLE, KY., Oct. 6, 1884.

There is a stronger and more active market for pig iron, and some satisfactory sales both for present and distributed delivery are being made. Prices are firm and upward. We quote:

PIG IRON.

| | |
|---|---|
| Southern Coke, No. 1 Foundry | $17 50@18 00 |
| " " " 2 " | 16 00@16 50 |
| Hanging Rock Coke, No. 1 Foundry | 18 00@18 50 |
| " " Charc'l, " " | 22 00@23 00 |
| Southern Charcoal, No. 1 Foundry | 18 00@19 00 |
| Silver Gray, different grades | 16 00@17 00 |
| Southern Coke, No. 1 Mill, Neutral | 15 00@ |
| " " " 2 " " | 14 00@ |
| " " " 1 " Cold Short. | 14 00@14 50 |
| Southern Charcoal, No. 1 Mill | 16 50@18 00 |
| White and Mottled, different grades | 13 00@13 50 |
| Southern Car Wheel, standard brands | 23 00@26 00 |
| " " " other brands | 22 00@24 00 |
| Hanging Rock Cold Blast | 26 00@27 00 |
| " " Warm " | 21 00@22 00 |

Specially reported by W. B. BELKNAP & Co., Nails, Wire, Iron, Hardware, Carriage and Wagon Goods.

LOUISVILLE, KY., Oct. 6, 1884.

Bars are still in same depressed condition that we have been obliged to report for months. If anything, the demand grows lighter, and the price correspondingly weak. No one ventures to hope for better times till after the election of the next month as a probble period of revival, while the more cautious prophets place it as far away as the midsummer of 1885, should the crops prove good.

Sheet Iron. Demand is unusually light, and the advance almost invariably realized at this season has not put in an appearance. The voluntary increase of discounts on those but recently established by the galvanizers goes to prove what most of us know,

that it is a bad year to attempt to put prices up.

Steel. There is no change in such grades of cast steel as are recognized first quality. The brands less well known for fineness and uniformity are put upon the market at various figures.

The steel shape and plow combination, formed some two months since has gone to pieces, and such new concerns as expected a favorable year to start in by cutting syndicate prices, will be sadly disappointed. Competition promises to be keen.

Nails. The preparation of the various leading nail factories to make steel nails threatens to speedily extinguish the difference in market prices heretofore existing between steel and iron nails. Shoenberger, Belmont, Benwood, Belfont, and Standard have, we learn, definitely decided to undertake the manufacture of steel nails, if not exclusively, in connection with the iron. Prices are weak for all kinds of nails. It is claimed by agents that the Iron Age's late reports from Chicago were colored by information from jobbers who were more anxious to buy than to sell.

Metals. Pig lead surprised the trade by suddenly advancing ¼ cent per pound, and it is so scarce in this market that no stocks are on hand.

Local trade has been materially assisted by the exposition, which has attracted large crowds from the contiguous country. Failures are unpleasantly frequent, and a number in southern towns heretofore noted for their progress and prosperity.

Weather is extremely hot, the mercury is in the nineties; it is propitious for ripening corn, planting winter wheat, and, coming as it does after the rain, for pasturage. We quote from store as follows:

| | | |
|---|---|---|
| Bar Iron | 1 80 | @1 90 |
| No. 27 Sheet | 3 15 | @3 25 |
| Galvanized Sheet, Best | 50% | |
| Crescent Steel | 11 | @ 12 |
| Plow steel slabs | 2½ | |
| Galvanized Iowa Barb Wire | 5 50 | @5 75 |
| Burden Shoes | 4 00 | @4 10 |
| Juniata Shoes | 3 70 | @3 75 |
| Carriage Bolts | 75% | |
| Steel Nails | 2 40 | @2 50 |
| Iron Nails | 2 30 | @2 40 |
| Sisal Rope | 8¼ | |
| Manilla Rope | 15 | @ 16 |

Screws, 70 and 5 per cent. Axes, 6.50@7.50. Narrow X cut saws, wide, 28@40 cents per foot. Narrow X cut saws, 22@26 cents per foot.

## St. Louis Iron Market.

Specially reported by HOFFER & Co., Pig Iron and Iron Ore, No. 318 Olive Street.

ST. LOUIS, Oct. 6, 1884.

Trade here remains unchanged. We quote prices same as last week, viz:

HOT-BLAST CHARCOAL.

| | |
|---|---|
| Missouri | $16 00@17 00 |
| Southern | 16 00@17 00 |
| Ohio | 20 00@22 00 |

COKE AND COAL.

| | |
|---|---|
| Missouri | 16 00@17 00 |
| Southern | 18 00@19 00 |
| Ohio | 20 00@22 00 |

MILL IRONS.

| | |
|---|---|
| Red Short | 15 50@16 00 |
| Neutral | 15 00@16 00 |

CAR-WHEEL AND MALLEABLE IRON.

| | |
|---|---|
| Missouri | 18 00@20 00 |
| Southern | 23 00@27 00 |
| Ohio | 23 00@30 00 |

Iron, par.

## METALS.

### TIN PLATES.

BLOCK TIN.

"Lamb and Flag," and "Straits."

| | |
|---|---|
| Large Pigs | 20 |
| Small Pigs | 21 |
| Bars | 25 |

TINNERS' SOLDER.

| | |
|---|---|
| No. 1 Refined | 13 |
| Market Half-and-Half | 15 |
| Strictly Half-and-Half | 16 |

ROOFING PLATS.

| | |
|---|---|
| IC, 14x20, Choice Charcoal Terne | 5 75 |
| IX, 14x20, " " " | 7 50 |
| IC, 20x28, " " " | 11 50 |
| IX, 20x28, " " " | 15 00 |
| IC, 20x28, Extra fine quality, charcoal roofing, genuine "old style" redipped | 15 75 |
| IX, 20x28, " " " | 19 75 |

TIN PLATES.

| | | |
|---|---|---|
| IC, | 10x14, Charcoal | 6 50 |
| IX, | 10x14, " | 8 50 |
| IC, | 12x12, " | 6 75 |
| IX, | 12x12, " | 8 75 |
| IC, | 14x20, " | 6 50 |
| IX, | 14x20, " | 8 50 |
| IXX, | 14x20, " | 10 50 |
| IXXX, | 14x20, " | 12 50 |
| IXXXX, | 14x20, " | 14 50 |
| IX, | 20x28, " | 18 00 |
| DC, | 100, Plate | 6 25 |
| DX, | 100, " " | 8 25 |
| DXX, | 100, " " | 10 25 |
| DXXX, | 100, " " | 12 25 |

COKE PLATES.

| | |
|---|---|
| IC, 10x14, bright, "B. V." grade | 5 25 |
| IC, 14x20, " | 5 25 |
| IX, 14x20, " | 7 25 |
| IC, 10x20, Gutters | 9 25 |

SHEET ZINC.

| | |
|---|---|
| In casks of 600 lbs., ₱ lb. | 6 |
| In smaller quantities, ₱ lb. | 7 |

BABBITT METAL.

| | |
|---|---|
| A 1 | 15 |
| No. 1 Ordinary | 9 |
| Antimony | 18 |
| Excelsior Babbitt Metal, No. 2 | 10 |
| " " " " 4 | 9 |

LEAD.

| | |
|---|---|
| Pig | 4 |
| Bar, (15 oz. bars) | 6½ |
| Sheet | 7½ |
| Pipe, full coils | 6¾ |

COPPER.

| | |
|---|---|
| Tinned Sheathing, 14x48, 14, 16, 18 oz | 25 |
| " " Planish'd, 14x48, 14, 16 oz | 35 |
| " " " Boilers 7, 8, 9 | 37 |
| Cooper Pit Bottoms | 25 |
| Tinning Extra | 15 |
| Brazier's Copper, 15 to 100 lb | 26 |
| " " 10 to 12 lb | 28 |
| " " 8 lb | 30 |
| " " 6 lb | 32 |
| Bolt " | 25 |
| Tinning extra | 40 |

## PAINTS, OILS, &c.

PAINTS.

| | |
|---|---|
| Black Lamp, coach painters ₱ lb | 20c |
| Black Lamp, ordinary ₱ lb | 6c |
| Black Ivory Drop, fair | 12@15c |
| Black Ivory Drop, best | 23c |
| Black Paint, in oil. kegs, 6c; assorted cans, | 9c |
| Blue Prussian, fair to best | 40@55c |
| Blue Prussian, fair to best, in oil | 45@55c |
| Blue Chinese, dry | 70c |
| Blue Ultramarine | 15@25c |
| Brown, Spanish | 1c |
| Brown, Van Dycke | 5@15c |
| Green, chrome | 8@15c |
| Green, chrome, in oil | 9@12@15c |
| Green, Paris | good, 20c; best, 25c |
| Green, Paris, in oil | good, 20c; best, 25c |
| Iron Paint, bright red ₱ lb | 2¼c |
| Iron Paint, brown ₱ lb | 1½c |
| Iron Paint, purple ₱ lb | 3c |
| Iron Paint, ground in oil, bright red ₱ lb | 5½c |
| Iron Paint, ground in oil, red ₱ lb | 5c |
| Iron Paint, ground in oil, brown ₱ lb | 4½c |
| Iron Paint, ground in oil, purple ₱ lb | 6c |
| Linseed Oil, raw | 59c |
| Single Boiled | 61c |
| Double " | 63c |
| Mineral Paints | 2@4c |
| Orange Mineral | 10c |
| Red Lead, American | 6¼@7c |
| Red Venetian, (English) dry | $1.50 to $1.75 |
| Red Venetian, in oil | assorted cans, 9c; kegs, 6c |
| Red Indian, dry | 9@12c |
| Rose Pink | 10@13c |
| Sienna, American, raw | 4c |
| Sienna, Burnt | 4½c |
| Sienna, burnt, in oil | 8@15c |
| Sienna, raw | 8@15c |
| Umber, burnt | 4@8c |
| Umber, burnt, in oil | 8@15c |
| Umber, raw | 3½@7½c |
| Umber, raw, in oil | 8@15c |
| Vermilion, Chinese | 90c |
| Vermilion, English | 50@55c |
| Vermilion, American, common | 15c |
| White Lead, American, pure dry | 6@6½c |
| White Lead, American, pure in oil | 6@6½c |
| White, Paris, English, prime | in brls. 1½@2c |
| Yellow Ochre, French | $1.75 |
| Yellow Ochre, French, in oil | asst'd cns, 9c; kegs, 6c |
| Yellow Ochre, American | in bbls., 1¼@1½c |
| Yellow Chrome | 8@18c |
| Yellow Chrome, in oil | 9@12@18c |
| Zinc White, American, No. 1, dry | 5@6c |
| Zinc White, American, No 1, in oil | 9c |
| Zinc White, French (Parish) dry | 9@12c |
| Zinc White, French in oil | 10@14c |

OILS.

| | | |
|---|---|---|
| Bleached W. Sperm oil | 1 05@ | 1 08 |
| Nat. " " " | 1 02@ | 1 05 |
| B. W. Elephant oil | 75@ | — |
| " Whale oil | 70@ | 72 |
| Prime Lard oil | 65@ | 67 |
| Extra No. 1 Lard oil | 63@ | — |
| Lubricating oils | 12@ | 25 |
| Miners' oil | 50@ | 55 |
| W. Pressed Fish oil | 42@ | — |
| Neatsfoot oil | 65@ | 80 |
| Steam-refined Cylinder oil | 40@ | 55 |
| Best Filtered " " | 65@ | — |
| Signal oil | 60@ | 70 |
| Paraffine | 12@ | 20 |

SUNDRIES.

| | |
|---|---|
| Benzine ₱ gal., | 8@10c |
| Turpentine ₱ gal., | 38½ c |
| Chalk | ⅝c |
| Chalk, block | ⅝c |
| Dryer patent Am'n | asst'd cans, 9c; keg, 7c |
| Frostings | 40c |
| Glue, white | 20@36c |
| Glue, sheet | 14@20c |
| Glue, ordinary | 9@12 |
| Glaziers' Points, zinc | 8c |
| Gum, Copal | 36c |
| Gum, Damar | 25c |

## BRASS.

ROLL AND SHEET BRASS.

*Brown & Sharpe's Gauge the Standard.*

New List, Jan. 17, 1884.

Dis 10@20%

COMMON HIGH BRASS.

| Wider than | 2 | 10 | 12 | 14 | 16 | 18 |
|---|---|---|---|---|---|---|
| and including. | 10 | 12 | 14 | 16 | 18 | 20 |
| To No. 20, inclusive. | .21 | .22 | .23 | .25 | .27 | .29 |
| Nos. 21, 22, 23 and 24. | .22 | .23 | .24 | .26 | .28 | .30 |
| Nos. 25 and 26 | .22½ | .23½ | .24½ | .27 | .29 | .31 |
| Nos. 27 and 28 | .23 | .24 | .25 | .28 | .30 | .32 |

Add 9 cts. ₱ lb. for sheets cut to particular widths and lengths.

Add ½ c. ₱ lb. additional on each number thinner than Nos. 28 to 38 inclusive.

Brass thinner than No. 38 is Platers' Brass.

| | |
|---|---|
| at | 55 cts. |
| Printers' rules | 45 cts. |
| Printers' Sheets and Plates cut to particular sizes and lengths to No. 20, inclusive | 30 cts. |

Brazing, Spinning and Spring Brass, one cent more than common High Brass.

Low Brass four cts. ₱ lb. more than common High Brass.

Gilding, Oreide and Bronze seven cts. ₱ lb. more than common High Brass.

SLITTING METAL.

Add to list as follows:

| | |
|---|---|
| Over ½ in to 2 in., inclusive, Nos. 12 to 20, inclusive | ½c. |
| Over ¼ in. to ½ in., inclusive, Nos. 12 to 20, inclusive | 1 |
| ¼ in. and narrower, not less than | 4 |
| Over ½ in to 2 in., inclusive, Nos. 21 to 28 inclusive | 1 |
| Over ¼ in to ½ in., inclusive, Nos. 21 to 28, inclusive | 2 |
| ¼ in. and narrower, Nos. 21 to 28, inclusive, not less than | 6 |
| Over ½ in. to 2 in., inclusive, Nos. 29 to 32, inclusive | 1½ |
| Over ¼ in to ½ in., inclusive, Nos. 29 to 32, inclusive | 3 |
| ¼ in. and narrower, Nos. 29 to 32, inclusive, not less than | 12 |
| Over ½ in. to 2 in., inclusive, No. 33 and thinner | 3 |
| Over ¼ in. to ½ in., inclusive, No. 33 and thinner | 6 |
| ¼ in. and narrower, No. 33 and thinner, not less than | 18 |
| Slit Metal cut to particular lengths, ₱ lb. additional | 5 |

PLATERS OR GOLD METAL.

| | |
|---|---|
| In bars | 40c. |
| In ingots | 43c. |
| In ingots, planed or polished | 46c. |

BRASS TUBING.

Brown & Sharpe's Gauge the Standard for all Tubing. Per lb.

| | |
|---|---|
| Plain, to No. 20, inclusive | |
| Above 5-16 inch to 3 inches, inclusive | $ 35 |
| Plain, to No. 21, above 3 inches | 45 |
| " 5-16 inch to No. 20 | 45 |
| " ¼ inch | 60 |
| " 3-16 inch | 1.00 |
| " ½ inch | 1.50 |

Bronze Tubing 3 cents per pound more than Brass.

Nos. 21, 22, 23, two cents advance on list for each number.

Nos. 24, 25, 26, four cents advance on list for each number.

Above No. 26, special rates.

All Mandrel-drawn Tubes, ⅜ inch and above, five cents advance on list prices.

All Mandrel-drawn Tubes under ⅜ inch, twenty-five cents per pound advance on list prices.

| | |
|---|---|
| Fancy Tubing to No. 20 | $0.43 |
| English, Scotch and Extra Pattern Fancy Tubing to No. 20 | 48 |

Tubing sawed or cut, 2 to 4 feet long, one cent advance on list.

Add to one cent one-half cent for each additional cutting under two feet.

WIRE IN COILS.

Old English gauge the Standard.

| | Common High Brass. | Low Brass. | Gilding, Bronze and Copper. |
|---|---|---|---|
| All Nos. to No. 16, inclusive | $ .22 | $ .26 | $ .30 |
| Nos. 17 and 18 | 23 | 27 | 31 |
| " 19 and 20 | 24 | 28 | 32 |
| " 21 | 25 | 29 | 33 |
| " 22 | 26 | 30 | 34 |
| " 23 | 28 | 32 | 36 |
| " 24 | 30 | 34 | 38 |
| " 25 | 32 | 36 | 40 |
| " 26 | 35 | 39 | 43 |
| " 27 | 38 | 42 | 46 |
| " 28 | 42 | 46 | 51 |
| " 29 | 45 | 49 | 54 |
| " 30 | 48 | 52 | 62 |
| " 31 | 51 | 55 | 67 |
| " 32 | 55 | 59 | 73 |
| " 33 | 59 | 63 | 82 |
| " 34 | 64 | 68 | 95 |
| " 35 | 70 | 74 | 1.30 |
| " 36 | 76 | 80 | 1.50 |
| " 37 | 1.00 | 1.04 | 1.70 |
| " 38 | 1.30 | 1.34 | 2.00 |
| " 39 | 2.00 | 2.00 | 3.25 |
| " 40 | 2.60 | 2.60 | 5.75 |

Spring Wire, 2 cts. ₱ lb. advance.

Whitened Wire, 3 cts. ₱ lb. advance.

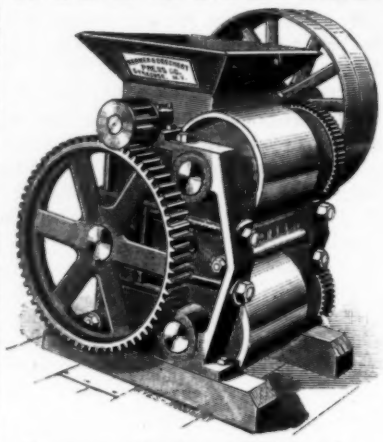
Flat, Square and Half-round Wire 4 cts. advance on Round Wire.

Fancy Wire not less than 10 cts. advance on Round Wire.

Spooling on one-pound spools 12 cts. ₱ lb. extra.

Spooling on ten-pound spools or more, 2 cts. ₱ lb. extra.


CRUSHERS.



Pressers, Heaters, Hullers, &c.

For Small or Medium-size

COTTON-SEED OIL MILLS.

Can furnish estimates for a complete mill or any part thereof. Also BALING PRESSES for Cotton, Woolen or Paper factories.

**Lard, Tallow Oleo** and **Paraffine** Presses.

Correspondence Solicited.

Boomer & Boschert Press Co., Syracuse, N. Y.

Or 219 Fulton St., New York City.

SHEET IRON

ROOFING.

Northrop's Patent Cap Seam Iron Roofing.

No rivets, screws or nails through the sheets. Easily applied and perfectly watertight.

CRIMPED IRONS

of various styles for Roofing and Siding.

IRON CEILING.

ORNAMENTAL. DURABLE. FIRE-PROOF.

A. NORTHROP & CO.

97 First Avenue,

PITTSBURGH, PA.

Derby Roll Top Desks.

—Best Office Desk in the World.—

Cherry, Walnut, Oak, Ash and Mahogany.

Send for Illustrated Catalogue.

DERBY & KILMER DESK CO.

55 Charlestown St., Boston, Mass.

REMINGTON STANDARD TYPE-WRITER

THE STANDARD WRITING MACHINE OF THE WORLD.

It much more than takes the place of the pen, as it does the work of two or three penmen, and much more neatly and legibly. The business man will appreciate this saving of valuable time. Dictate your correspondence etc., to a Type-Writer operator and have your time and strength for other matters. (Perfect press copies obtained in same way as of pen writing.)

Again the Type-Writer is well-nigh indispensable to overworked professional men. It is a complete relief from the strain of pen-writing.

Lawyers have their papers written with the Type-Writer. Many copies can be made at one time, (absolute duplicates) thus multiplying speed.

Clergymen write their sermons with the Type-Writer, and hence can read them in a dim ligh

Authors, journalists, and others compose directly on the machine. It facilitates composition, as the manipulation becomes purely mechanical, and owing to its greater speed the mind does not lose its freshest and best thoughts, as when waiting for the slow pen to catch up. In use throughout the world. Perfect satisfaction guaranteed. Send for illustrated pamphlet, with testimonials.

WYCKOFF, SEAMANS & BENEDICT, 281 & 283 Broadway, New York.

## Carriage and Wagon Material.

| | |
|---|---|
| **AXLES.** | |
| Half Patent, common | dis 50 % |
| Common | rate 5 |
| Concord | 8½ |
| **BODY LOOP ENDS.** | |
| Lipped, set | 60 |
| Bolts, Eagle | 70 |
| **CLIPS.** | |
| Superior Axle | dis 40 % |
| Norway | " 20 % |
| Saddle | doz set $17 00 |
| **CLIP KING BOLTS.** | Nos. 1 & 2 / 4 |
| Flanged, ℔ doz | $2 75 / 3 25 / 4 50 |
| **DASHES.** | |
| Leather, new list | dis 5 % |
| **ENAMELED CLOTHS.** | |
| Muslin, ℔ yard, 5-4 | 22 |
| Drill, " 50 in | 28 |
| Duck, " 50 in | 38 |
| Tan Back, " 5-4 | 40 |
| **FELLOE PLATES.** | |
| Per ℔ | 10 |
| **FIFTH WHEELS.** | |
| Derby, ⅝, ℔ doz | $7 50 |
| " ¾, " | 8 50 |
| **RUBBER DUCK AND DRILL—25 % off list.** | |
| **SPRINGS.** | |
| Seat, 1½ x2x26, ℔ pair | 90 |
| Buggy, 1½ in. and larger | 10 |
| " 1¼ to 1⅜ in | 10½ |
| Oil-tempered springs 1c. advance from above. | |
| **SHAFT COUPLINGS.** | |
| Discount | 40 % |
| **MALLEABLE CASTINGS.** | |
| Rate | 8 |
| Core | 12 |
| **POLE EYES AND COUPLINGS.** | |
| Discount | 40 % |

## Business Chances.

**☞For the purpose of making the MANUFACTURERS' RECORD a still more valuable medium of communication between its readers North and South, we will publish, FREE OF CHARGE, short advertisements, not exceeding 40 words, from those in the South who have mills, factories, manufacturing sites or water-power for sale, capital wanted for industrial enterprises, &c., &c.; while readers in other sections who desire to engage in manufactures at the South are also invited to use these colums, without cost, either in seeking information regarding the advantages and special claims of different localities, or for asking about good openings for men and money. This department is also free for Southern manufacturers who wish to advertise for mill managers superintendents, engineers, &c.**

**In corresponding with any of these advertisers please mention the Baltimore Manufacturers' Record.**

A GENTLEMAN who is an expert in the opening and developing of marble and stone quaries, is looking for an opening in the South Address Harvey, care MANUFACTURERS' RECORD.

WANTED.—A position as Agent and Superintendent of a Woolen or Worsted Mill, by an English manufacturer of large experience in finest grades of all styles of Men's wear. Would undertake the sale of the product if necessary. Highest testimonials.—Address XY, care MANUFACTURERS' RECORD.

WATER POWER TO GIVE AWAY.—A good chance for capitalists on Saluda river, S. C.; has twelve feet natural fall; easily improved; desirable for investments; two miles from Williamston; Three miles from Pelzer mills. Address J. R. Wilson, Williamston, Anderson Co., S. C.

FOR SALE.—A Tin, Galvanized-Iron Cornice, Gas and Plumbing Establishment in one of the largest and most prosperous inland cities in the South. A splended opportunity. Special reasons. For particulars address S. B. Lowe, Chattanooga, Tenn.

WANTED.—A good location for a saw and planing mill, where timber—poplar, pine and oak—is plenty and stumpage can be had. Address P. Master, Kenton, Obian county, Tenn.

FOR SALE—A cotton mill situated on the line of the Illinois Central Railroad, near the city of Canton, Miss., in a splendid cotton region, good water supply, cheap fuel, labor abundant. The factory would be equally adapted to ginning on a large scale, by improved methods, and cotton-seed-oil mill combined. The property consists of 28½ acres land, lying along the railroad; factory building 100 yards from the railroad, in the centre of the tract, substantially built brick, 200x90 feet; contains one English engine 200 horse, two English lappers, shafting and pulleys. There is a double dwelling-house on the property. Bigsby & Edmonds, Baltimore, Md.

WANTED.—Having just patented a new and useful tool, would like to make arrangements with some hardware manufacturer to make them either on royalty or will sell shoprights. Address T. A. P., Box 13, Plymouth, N. C.

SPLENDID barrel flouring mill and elevator in Tennesee for sale. On track and river. In perfect order and full operation. For particulars, apply to Meriwether & Gilmer, Clarksville, Tenn.

COTTON MILL FOR SALE.—A North Carolina cotton mill, with or without machinery. Well adapted and located for cotton or woolen manufacturing, hosiery, underclothing, rice milling, &c. A great bargain is offered. Satisfactory reasons for selling. Address Bigsby & Edmonds, Baltimore.

FOR SALE.—A foundry and machine shop now doing a fair business, which can be largely increased by additional capital. Has a lot of good patterns for engines and mills, boiler tools, &c., reason for selling, bad health of the owner. Addres B & P, box 33, Staunton, Va.

MICA.—Party with some capital wanted to mine Mica deposits in Virginia. Address Pick, care of MANUFACTURERS' RECORD.

WANTED.—A situation as manager of a cotton mill by a manufacturer of large experience. Addres S. L., care of MANUFACTURERS' RECORD.

MINING ENGINEER desires engagement as manager or superintendent. Makes assays. Late superintendent large copper mine in North Carolina. Best of references. Address Clarence M. Buel, M. E., 275 28th street, Brooklyn, N. Y.

YARN FACTORY FOR SALE.—Stocked with latest improved machinery, and having an established trade in rope, twines, &c. A magnificent opportunity for investment. Bigsby & Edmonds, Baltimore, Md.

COTTON MILL FOR SALE.—Built in 1879, in the centre of cotton region; 3,000 spindles; machinery nearly new and first class. Whole can be bought at great sacrifice, or mill will be put into stock company. Full particulars upon application to Bigsby & Edmonds, Exchange Place & Commerce street, Baltimore.

WOOLEN MILL AND WATER POWER FOR SALE.—Well located in West Virginia, buildings and machinery new, latter of most improved makes. One of the finest water powers in the State. Address G. W. M., care MANUFACTURERS' RECORD, Baltimore, Md.

CAPITAL WANTED.—For manufacturing an article on which patent is now pending. A large and profitable business can be done. Address J. C. T., care MANUFACTURERS' RECORD.

WANTED TO BUY.—A second-hand loom, for making bagging for cotton baling. Address E. O. C., care MANUFACTURERS' REDORD.

Young man practically experienced in managing foundry, machine and wood shops, who has made handling help and economical production a study, is open to engagement as superintendent or as working partner in business requiring little capital. References given and required. Address E. L. ROSS, Indian Orchard, Springfield, Mass.

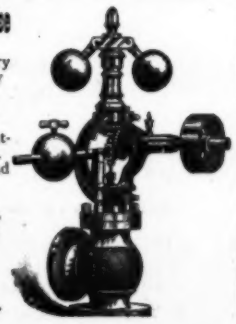

# FOR SALE Cheap!

2, 4-Horse Power Engines,
4, 8-Horse Power Engines,
4, 12-Horse Power Engines,
3, 15-Horse Power Engines,
2, 18-Horse Power Engines,
3, 20-Horse Power Engines,
3, 25-Horse Power Engines,
1, 30-Horse Power Engine,
1, 35-Horse Power Engine,
1, 40-Horse Power Engine,
2 Steam Pumps, 1¼ inch suction, and 1 inch discharge.
3 Pipe Machines.
100 Wrought rim pulleys.
Engineers and Machinists' supplies in general.

WM. C. CODD,
BALTIMORE, MD.

SCALES,
Anvils, Vises, Portable Forges, Blacksmith's Tools, Hardware Specialties
Send for Price-List.
Chicago Scale Co., CHICAGO.

The Gardner Governor.
Over 30,000 in Use
Adapted to every style of stationary and portable steam engines.
Warranted to give satisfaction, or no sale.
☞For Circulars and Prices address
The Gardner Governor Co.
QUINCY, ILL.



GAS BILLS REDUCED

15 to 40 Per Cent.
By attachment to meter of
Sleeman's Gas-Saving Governor!
(Can be attached to any gas meter in 30 minutes.)
THEY EQUALIZE THE PRESSURE.
REMEDY SMOKING & "slowing" BURNERS.
INSURE COMPLETE COMBUSTION.
INCREASE BRILLIANCY OF LIGHT.
PERMIT NO WASTE GAS.
NO POISONOUS VAPORS.
NO VITIATED ATMOSPHERE.
**Save Their Cost Every Three Months!**
**(Equal to 400 Per Cent. Per Annum.)**
Entire Metallic Construction, Simple, Efficient, Durable,
Indorsed by highest
Commercial, Mechanical and Expert Authorities
**Over 5,000 in Service.**
(Warranted for 5 years.)

**THEY "SPEAK FOR THEMSELVES."**

**"Saving 33⅓ Per Cent."**
"TEN MACHINES IN SERVICE—Gas Bills Reduced $140 per Week."—[Metropolitan Opera House, N. Y.
JAS. STEWART, Jr., Gas Engineer.
W. W. TILLOTSON, Business Manager.

**"SAVING 33 PER CENT."**
"Have thoroughly tested several on our factories.—Are much pleased with them."
POTTIER & STYMUS MANUFACTURING CO.,
Lexington Avenue, 41st and 42d streets, New York.

**12 MACHINES—3 THEATRES.**
"Satisfactory Reduction in Gas Bills. Better Light. We recommend it."
HARRY MINER'S Bowery Theatre. } A.
" " People's " } Z.
" " Eighth Ave. "

**"SAVING 35 TO 40 PER CENT."**
"Astonishing results. Does all you claim."
NEW YORK COMEDY THEATRE.
GALE & SPADER, Proprietors.

**"4 MACHINES—SAVING 25 Per Cent."**
"Eighteen months in service. Entirely satisfactory." DANIEL & SON, Importers, Broadway, N. Y.

**"SAVING 33⅓ PER CENT."**
ROBBINS & APPLETON,
Agents American Watch Co., New York.

**"SAVING 25 PER CENT."**
"Six months' service. Works beautifully." Vanderbilt Building. J. K. STEVENSON, Engineer.

**"SAVING 35 TO 40 PER CENT."**
Controls Gas Engine and Jumping Lights perfectly.
ROYAL PRINTING HOUSE, Philadelphia.

**"SHOWS 31 PER CENT. SAVING."**
AM. DISTRICT TEL. CO., Philadelphia.
A. S. LYLE, Superintendent.

**"SAVING 35 PER CENT."**
NEW HAVEN CLOCK CO., HIRAM CAMP, Pres't.

**Large Economy, Satisfactory Service.**
Ex. Mayor W. W. WHEATON, Detroit, Mich.

**"COST $90—SAVING $600 PER ANNUM."**
WARREN F. LELAND,
Proprietor Leland House, Chicago, Ill.

**"Saving 34 Per Cent."—U. S. P. Office.**
E. R. BRINK, P. M., Wilmington, N. C.

**"SAVING 40 PER CENT."**
T. T. SMITH, Agt. R. & D. RR., Atlanta, Ga.

**"SAVING 33⅓ PER CENT."**
100-Light Governor—Six months' trial.
W. J. BOOKER,
Treas'r Pioneer Cotton Mill, Memphis, Tenn.

**"SAVING 40 PER CENT."**
AUSTIN (TEX.) STATESMAN.

**"SAVING $800 ANNUALLY."**
GALVESTON (TEX.) NEWS BUILDING.

**"SAVING 40 PER CENT."**
U. S. CUSTOM HOUSE, U. S. MARSHALS' OFFICE,
And all Government Buildings, Galveston, Tex.
JOHN M. WHEELAN, Official in Charge.

**REFERENCES—NEW YORK CITY:**

| | |
|---|---|
| R. H. Macy & Co. | Hanover Block. |
| Young Men's Christ'n Ass'n. | Hartford & N.H.R.R.Co. |
| Cooper Union Annex Hall. | Belvidere Hotel. |
| Hanover National Bank. | Wilcox & Gibbs. |
| Eureka Fire Hose Co. | Home Insurance Co. |

And 1,500 others.
☞SPECIAL PAMPHLETS BY MAIL.☜

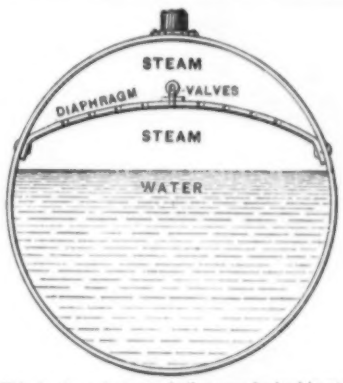
☞THE EXCLUSIVE AGENCY☜
**For This City, or State,**
Can be secured by prompt application to
The National Gas Saving Co.
21 E. 14th Street, NEW YORK CITY.

# For Sale

## Machinery & for & Handle and Spoke Factory,

One Drag Saw, for cutting logs into length suitable for handles or spokes.
One Bull or Centre Saw, with improved adjustable heads, for ripping any large or medium size timber into handle staves.
One Spliting Saw, for ripping small timber into handle or spoke staves.
One Blocking Saw sloping table, for blocking out handles.
Two Automatic Swing Lathes, for axe, mattock, coal pick, or any other oval, flat, straight or bent handles. Capacity, 25 to 30 dozen axe; or 35 to 40 dozen sledge handles.
One Spoke Lathe, for spokes, or sledge, mattock, or hammer handle. Capacity, 25 to 30 dozen.
One Guage Lathe, for any kind of round turning.—Broom handles, augur handles, plow and chair rounds, &c., &c. Capacity, 100 dozen augur handles.
One combined Throater and Trimmer, for handles.
One Trimming Saw.
One Spoke Planer and Throater.
One Spoke Throater.
One Ripping Saw.
One Cut-off Saw.
One Broad Double Grinder, to carry two twelve inch sand belts.
One Narrow Double Grinder to carry two six inch sand belts.
One hundred feet of Shafting with couplings complete.
One Lot Medart Wrought Rim Pulleys for driving all above machinery.
One Lot of Patterns, consisting of straight axe, bent axe, railroad pick, coal pick, mattock sledge, hatchet, hammer, adz, spokes, augur, broom handles, &c., &c. Probably 60 and 75 different styles and sizes.
ENGINE AND BOILER ALSO FOR SALE.
The manufacture of handles is a very profitable business, in any locality where there is hickory timber, and the plant required for the business is not an expensive one. The above equipment of a factory, with a daily capacity of 100 to 125 handles, is in first-class condition and will be sold at a reasonable price. For particulars, address
"WESTON," MANUFACTURERS' RECORD,
BALTIMORE.

THE LAWSON NON-EXPLOSIVE BOILER.




This is the only steam boiler ever devised in strict compliance with the demands of natural laws. It gives complete immunity against explosions, delivers dry steam, prevents all incrustation and deposits on the bottom plates, affords safety with high pressure, and secures great economy. The invention is applicable to every style of boiler, and can be readily applied, internally or externally, to new or old boilers. Licenses granted on liberal terms to manufacturers. Send for description.
**Lawson Non-Explosive Boiler Co.,**
**155 & 157 BROADWAY, N. Y.**

J. W. LOANE,
13 N. Gay Street, BALTIMORE.
Manufactures and sells at lowest rates
TENTS, AWNINGS, FLAGS
CAMPAIGN GOODS, FLAGS, BANNERS, LANTERNS, BALLOONS, &c., &c. GIVE HIM A CALL. *ORDERS OR ENQUIRIES BY MAIL RECEIVE PROMPT ATTENTION.*

Sherman Mfg. Co.
JACKSON, TENN.
SPECIALTIES:
Automatic Engines; Slide Valve Engines, Portable and Stationary; Portable and Stationary Boilers; Saw Mills and Saw Mill Machinery; Pulleys, Shafting, Hangers, &c.
Agents for the Ballantine Ice and Refrigerating Machine, and for the Cube Pipe Tongs, the best and cheapest Pipe Tongs in the world.
CORRESPONDENCE SOLICITED.

Wm. H. Haskell, President. E. S. Mason, Treasurer. D. A. Hunt, Agent.

# Wm. H. HASKELL CO.

MANUFACTURERS OF

GIMLET POINT

## COACH SCREWS.

Bolts, Cold-Punched Nuts & Washers,

Suitable for Machinery of all kind.

Office and Works: 277 Main St., PAWTUCKET, R. I., U. S. A.

HENRY B. NEWHALL CO., Agts.,

105 Chambers St., NEW YORK. 47 Pearl St., BOSTON.

# HOOPES & TOWNSEND,

MANUFACTURERS,

PHILADELPHIA, PA.

KEYSTONE BOILER RIVETS.

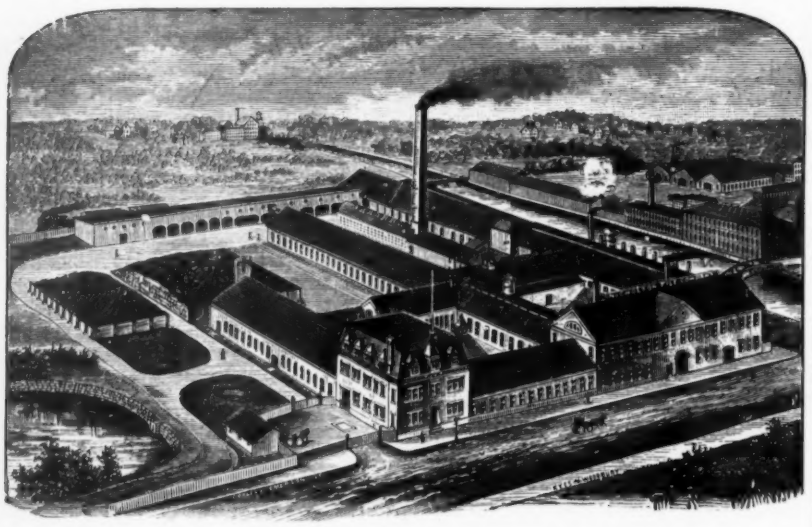
Cold-Punched Square and Hexagon Nuts.

Finished and Case-Hardened Steel Hexagon Nuts.

BRIDGE RODS AND RIVETS.

BUILDERS' IRON WORK.

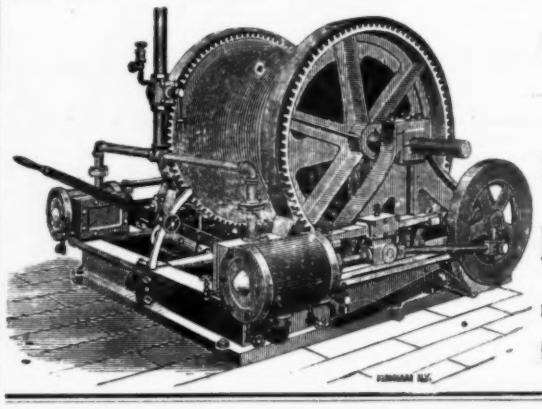
TANK AND COOPERS' RIVETS.



# Nicholson File Co.

Works—PROVIDENCE R. I.—1882.

# IMPROVED HOISTING ENGINES



—WITH—

WIRE-ROPE DRUMS AND SAFETY BRAKES.

SPECIALLY ADAPTED TO

Mining & Interests.

MANUFACTURED BY THE

Lidgerwood Mfg. Co.

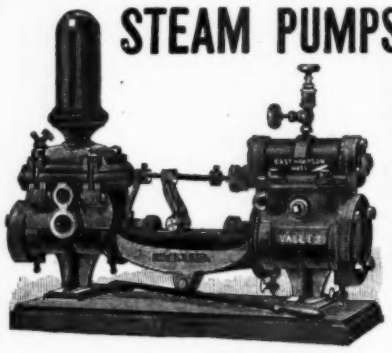
96 Liberty St., N. Y.

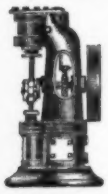
Hoisting Engines for all purposes.

MORTON, REED & CO., Agts.

59 & 61 German St., Baltimore.

# STEAM PUMPS FOR EVERY DUTY.





Acme.

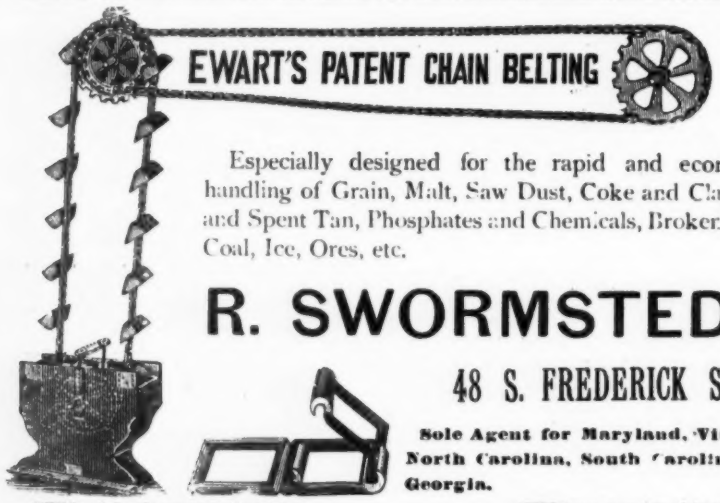
Best Boiler Feed PUMPS in the World.

Bucket Plunger.

VALLEY MACHINE CO.,

Easthampton, Mass.

# EWART'S PATENT CHAIN BELTING



Especially designed for the rapid and economical handling of Grain, Malt, Saw Dust, Coke and Clay, Dry and Spent Tan, Phosphates and Chemicals, Broken Stone, Coal, Ice, Ores, etc.

## R. SWORMSTEDT,

48 S. FREDERICK ST.

Sole Agent for Maryland, Virginia, North Carolina, South Carolina and Georgia.

Send for Illustrated Catalogue. Please mention this paper.

COVERT'S PATENT HARNESS SNAPS, CHAIN & ROPE GOODS,

ADJUSTABLE SOLDERING IRONS, &c.

These Goods are sold by all Leading Jobbers in General and Saddlery Hardware, at manufacturers' prices. Send for illustrated catalogue and price list.

# COVERT MF'G CO., West Troy, N. Y.

—JOHN MERRY,—

# WEST SIDE GALVANIZING WORKS,

535 to 547 West 15th Street, New York.

—MANUFACTURER OF—

The "LION" and "PHŒNIX" Brands of Galvanized Sheet Iron.

Corrugated Iron for Roofing or Siding, Tin Plates, Solder, Slating and Roofing Nails, Tinned Galvanized and Black. All kinds of Iron work Galvanized or Tinned to order.

# A. G. ALFORD & CO.

WHOLESALE DEALERS IN

GUNS, PISTOLS, Ammunition, &c.

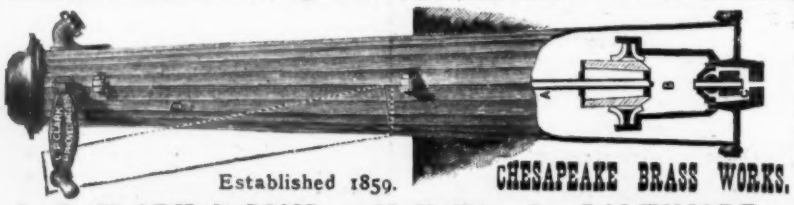
SOUTHERN AGENTS FOR

COLT GUNS, REPEATING RIFLES, &c.

Remington Guns, Rifles, &c.

Delaware Cartridge Co.s' Paper Shells, &c.

116 West Baltimore Street, near North, Baltimore, Md.



Established 1859. CHESAPEAKE BRASS WORKS.

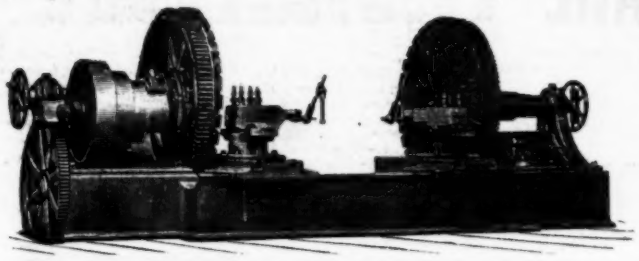
L. P. CLARK & SONS, 34 N. Holliday St., BALTIMORE.

# WM. B. BEMENT & SON,

**Philadelphia,**

Manufacturers of

METAL Working Machine TOOLS



of all descriptions, and of a great number of sizes, including STEAM HAMMERS, Steam and Hydraulic Riveters, Cranes, Punches, and Shears, Bending Rolls, Plate Planers, &c.

---

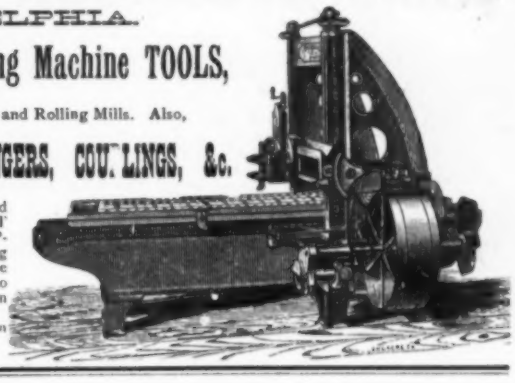
# WM. SELLERS & CO.

PHILADELPHIA.

## IRON and Steel-Working Machine TOOLS,

For Railways, Machine Shops and Rolling Mills. Also,

**SHAFTING, PULLEYS, HANGERS, COUPLINGS, &c.**



Were the first parties to design and introduce the BALL and SOCKETT HANGERS, ADJUSTABLE COUPLINGS, and the system of selling Shafts, Pulleys and Couplings by the piece. Will be pleased at any time to give estimates for work in place, in mills, or at our works.

☞ Price-Lists and other information given when requested.

---

—THE—

# Cameron Steam Pump

THE STANDARD OF EXCELLENCE.

UPWARD of 30,000 in Use.

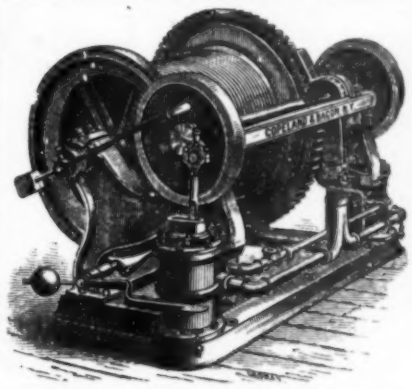
SEND FOR ILLUSTRATED CATALOGUE.

**The A. S. CAMERON Steam Pump Works.**

433 East 23d-St.

NEW YORK.

---



# BACON Winding Engines, Furnace Hoists, Mine Hoists.

(With or Without Boilers.)

"Mining PLANTS," Concentrating Works and Dredging Machinery Furnished Complete.

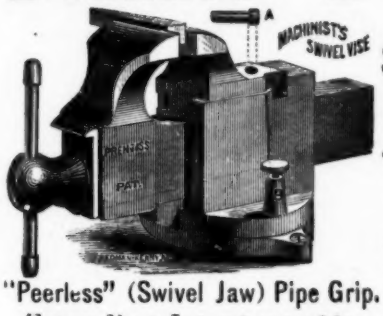
**COPELAND & BACON,**

85 Liberty Street, New York.

REFERENCES:—Croton Magnetic Iron Mines Brewster's, N. Y. Crown Point Iron Co., Crown Point, N. Y. Belvidere Iron Co., 52 Broadway, New York. Sea Island Chemical Co., Beaufort, S. C.

---

# Prentiss' Patent Vises.




Adjustable Jaw.

**Stationary or Pat. Swivel Bottoms.**

CANNOT GET OUT OF ORDER.

Cheapest and Best Vises for Railroad Shops, Machinists, Manufacturers, Mechanics, &c.

"Peerless" (Swivel Jaw) Pipe Grip.

Every Part Interchangeable.

CAN BE USED ON ANY VISE.

For Sale by the Trade.

**PRENTISS VISE CO., 23 Dey Street, NEW YORK, Sole Proprietors.**

---

# THE NATIONAL CHUCK

WARRANTED

THE BEST CHUCK IN THE MARKET.

MANUFACTURED BY

THE National Mfg. Co.

MANUFACTURERS OF

Combination, Universal and Independent

**LATHE CHUCKS.**

NEW HAVEN, CONN.

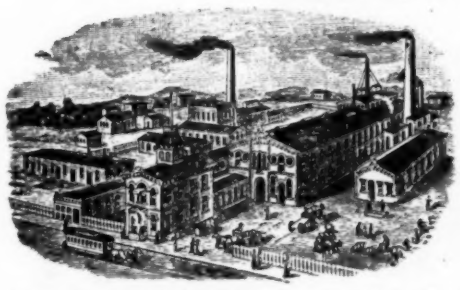
---

# Ludlow Valve Manfg. Co.

Office and Works:

938 to 954 River Street, and 67 to 83 Vail Avenue,

—TROY, N. Y.—



**VALVES**

Double and Single Gate, ¼ inch to 48 inch, - outside and Inside Screw, Indicators, etc., for Gas, Water, Steam, Oil.

*Send for Circular.*

Also Fire Hydrants, Yard and Wash Hydrants, Check and Foot Valves.

---

THE MIDVALE STEEL CO.

# TIRES and AXLES

OF EVERY DESCRIPTION.

HOOP AND MACHINERY STEEL.

SPRING AND GUN STEEL.

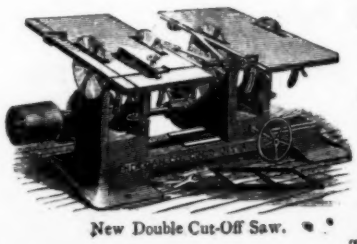
CRUCIBLE AND OPEN HEARTH STEEL.

Works & Main Office: Nicetown, Philadelphia, Pa.

BRANCH OFFICE: 333 Walnut St., Philadelphia, Pa.

---

# Wood-Working Machinery



New Double Cut-Off Saw.

Of the Latest and most Improved Designs for Planing Mills, Furniture and Chair Factories and Agricultural Works, Carriage and Buggy Shops, and

**GENERAL WOOD WORKERS**

MANUFACTURED BY

## THE EGAN CO.

228 to 248 West Front St., Cincinnati, O., U. S. A.

Thos. P. Egan, Pres. Ed. Ruthven, Sec. F. Danner, Supt.

---

# The Babcock & Wilcox Water Tube Boilers.

BRANCH OFFICES:

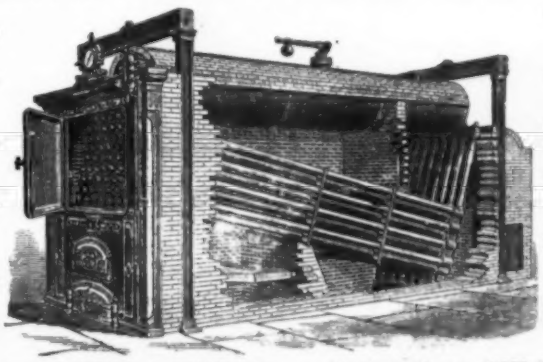
50 Oliver Street, Boston.

32 N. 5th St., Philadelphia.

96 Fourth Ave., Pittsburg.

54 Carondelet St., N. Orleans.

64 W. Third St., Cincinnati.



BRANCH OFFICES:

707 Market St., St. Louis.

64 S. Canal St., Chicago.

561 Mission St., San Francisco.

San Ignacio, No. 50, Havana, Cuba.

107 Hope Street, Glasgow, Scotland.

Manufactured by the BABCOCK & WILCOX CO., 30 Cortlandt Street, NEW YORK.

# SAML. G. B. COOK & CO., HARDWARE

MANUFACTURERS' AGENTS

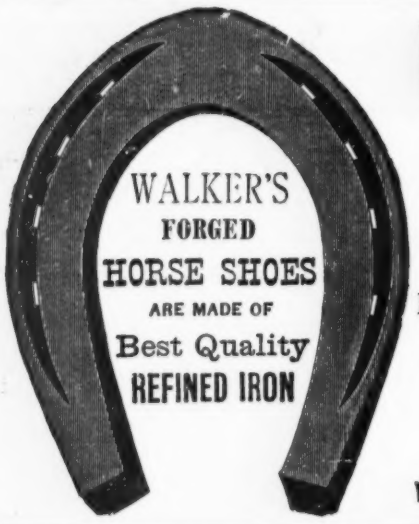
63, 65, 67 and 69 German St., BALTIMORE, MD.

AGENTS FOR

T. V. Allis Mnfg. Co.—Buckthorn Wire.
American Screw Co.—Screws, Rivets, Bolts, etc.
Bradford Lock Works.
Boss Molasses Gates.
Carr & Crawley.—Shelf and Carriage Hardware.
Lancaster Bolt Co.—Eagle Carriage Bolts.
Lawson & Brenizer.—Hay and Manure Forks.
Meriden Britannia Co.—Rogers Bros.' A1 Plated Goods.
Northwestern Horse Nail Co.
Nicholson File Co.
Naugatuck Cutlery Co.
Globe Horse Nail Co.

Clark Hardware Co.—Spring Butts, Screen Frames, etc.
Cowles Hardware Co.—Geers, Butts, Screw Drivers, etc.
H. Chapin's Sons.—Rules, Levels, Gauges, etc.
Clark Bros. & Co.—Bolts.
Essex Horse Nails.
A. Field & Sons.—Tacks, Finishing Nails, etc.
Hubbard, Bakewell & Co.—Lippincott Axes, Saws, Shovels and Hoes.
Holroyd & Co.—Stocks and Dies.
Henry W. Kipp.—Hammers.
Klein, Logan & Co.—Picks, Mattocks, Sledges, etc.
Kimball's Patent Shovels and Spades.
Lockwood Steel Hoes.

Peck Bros. & Co.—Brass Corks.
Payson Mnfg. Co.—Building Hardware.
Patton Mnfg. Co.—Enameled and Tin'd Hollow Ware.
Roy & Co.—Strap and T Hinges and Wrought Butts.
Saranac Horse Nail Co.
Scott Mnfg. Co.—Peach and Apple Pearers, etc.
George M. Scott.—Blacksmith Bellows.
Wilson's Mnfg. Co.—Coffee Mills, Vises and Ship Hardware.
Walker's Horse and Mule Shoes.
International and Pimlico Brand of Horse Nails, Foreign and Domestic Hardware, Cutlery, Chains, Pistols, etc.




# Walker Horse Shoe Co., Baltimore, Md.

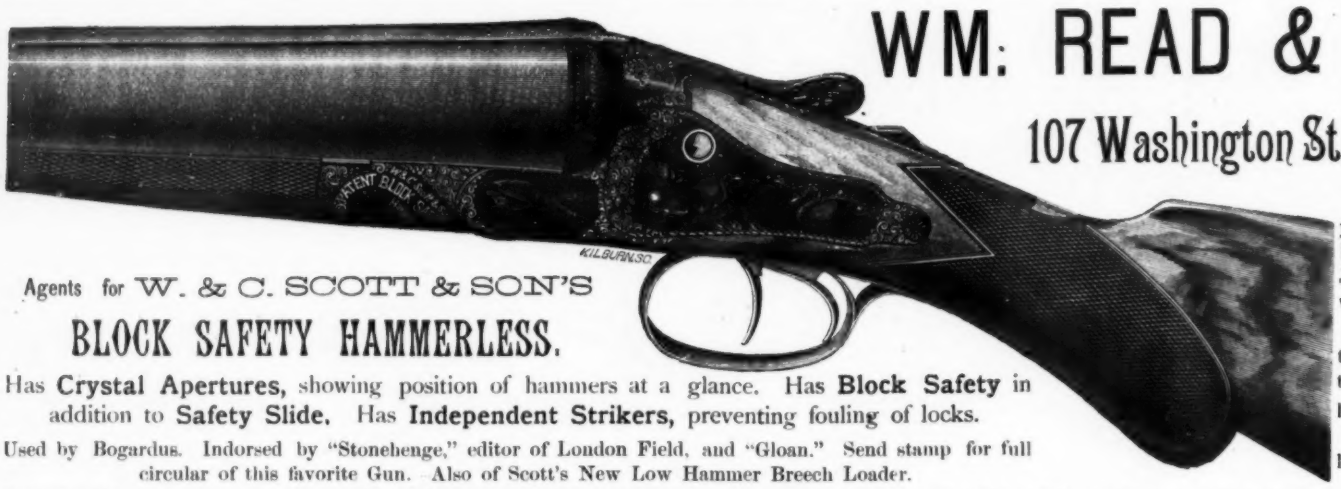
OF SUPERIOR SHAPE and FINISH.

Clean Crease of Proper Width and Depth. Nail Holes Punched Through at Proper Angles.

Free from Burs. Outside Edges Smooth and Free from Bulges. Popular with all Shoers, as they are easily fitted. EVERY SHOE WARRANTED. ALSO,

## MULE SHOES,

Of Superior Pattern, Quality and Shape. Sole Patentees and Manufacturers.




# WM. READ & SONS,

107 Washington St., Boston, Mass

Agents for W. & C. SCOTT & SON'S

BLOCK SAFETY HAMMERLESS.

Has **Crystal Apertures,** showing position of hammers at a glance. Has **Block Safety** in addition to **Safety Slide.** Has **Independent Strikers,** preventing fouling of locks.

Used by Bogardus. Indorsed by "Stonehenge," editor of London Field, and "Gloan." Send stamp for full circular of this favorite Gun. Also of Scott's New Low Hammer Breech Loader.

We are now receiving this year lots of our own pattern DOGSKIN LEATHER JACKETS, water proof and wind proof.

This make cannot be obtained elsewhere in the United States. Very soft and pliable skins.

Send stamp for Circulars of Fine Guns.

**Sole American Agents for the Celebrated ROYAL MAIL Light Bicycles; Weight 35 lbs.; Used by Prince, Morgan, Dolph, Brooks, Chambers, Etc. The coming Favorite Wheel! Good Agents Wanted. Send Stamp for Illustrated Circulars.**

# New Model Top Snap Champion Single Breech-Loading Shot Gun.

PRICES.

Plain Barrel, 12 Bore.....$15.00
Plain Barrel, 10 Bore.....$16.00

PRICES.

Twist Barrel, 12 Bore .....$18.00
Twist Barrel, 10 Bore.....$19.00

These Guns have Pistol Grip Stock, Rebounding Lock and Patent Fore-end Fastening. For Descriptive Catalogue and Prices to the Trade, address the Manufacturers,

# JOHN P. LOVELL'S SONS,

**P. O. BOX 2277.** **Cor. Cornhill and Washington Sts., Boston, Mass.**

ALSO MANUFACTURERS OF THE

AMERICAN BULL DOG DOUBLE-ACTION REVOLVERS,

SINGLE-ACTION REVOLVERS, AIR RIFLES, AIR PISTOLS, POLICE GOODS, &c., &c.

# HARDWARE.

## Baltimore WHOLESALE Prices.

### ANVILS.

Eagle and Vulcan ..... ℔ lb. 10 c. dis 20%
Wright's ..... 10½c
Armitage's Mouse Hole ..... 9½c
Trenton ..... 10¾c
Wilkinson's ..... 10½c

### AUGERS AND BITS.

Conn. Valley Mfg. Co. } dis 60%
Douglass Mfg. Co. } from list of
Ives } Jan. 7, 1880
Cook's Douglass Mfg. Co ..... dis 40&10%
Griswold ..... dis 50&10%
Patent Solid Head ..... dis 25%
Russell Jennings' Auger, Dowell, Machine-Dowel and Hand Rail Bits ..... dis 10&10&10%
Ives' "Jennings" Bits ..... dis 40&10&10%
Expansive Bits, Clark's small, $18; large, 26..dis 25%
Expansive Bits, Ives' ..... $20@30, dis 33⅓%
Expansive Bits Blake's ..... $20, dis 40%
Hollow Augers, Ives' ..... dis 25%
Hollow Augers, Douglass' ..... dis 25%
Hol. Aug., Bonney's Adjust., ℔ doz $48, dis 25&10%
Hol. Aug., Stearns' Adjust., ℔ doz $48, dis 20&10%
Hol. Aug., Ives' Expansive, each $4.50, dis 30&10%
Hol. Aug., Universal Expansive, each $4.50, dis 20%
Wood's ..... dis 25%
Gimlet Bits ..... $7.50 ℔ gross, dis 50%
Gimlet Bits, Diamond ..... ℔ doz $1.25, dis 40%
Double Cut Gimlet Bits, Shephardson's ..... dis 40%
Double Cut Gimlet Bits, Douglass' ..... dis 33⅓%
Double Cut Gimlet Bits, Ives' ..... dis 50%
Morse's Bit Stock Drill ..... dis 25%
L'Hommedieu's Ship Augers ..... dis 15%

### AWL HAFTS.

Sewing Brass Ferrule ..... $3.50 ℔ gross—dis 40&10%
Patent Sewing, Short ..... $10 ℔ gross—dis 40&10%
Patent Sewing, Long ..... $1.20 ℔ doz. net
Patent Peg, Plain Top ..... $10 ℔ gross—dis 40&10%
Patent Peg, Leather Top ..$12 ℔ gross—dis 40&10%

### AWLS, BRAD SETS, &c.

Awls, Sewing, Common ..... 75c. to $1
Awls, Shouldered Peg ..... 75c to $1
Awls, Patent Peg ..... 50c to $1.50
Awls, Shouldered Brad, ℔ gross $2.70—dis 25&10%
Awls, Handled Brad ..... $7 ℔ gross—dis 25&10%
Brad Sets, Aiken's ..... ℔ doz. $12—dis 45&10%
Brad Sets, No. 42, $10.50; No. 43, $12.50....dis 70%
Brad Sets, Stanley's Exc.' No. 1, $9.60. dis 30&10%
Brad Sets, Stanley's Exc.' No. 2, $4,80. dis 30&10%
Brad Sets, Stanley's Exc.' No. 3, $7.80. dis 30&10%

### AXES.

Collins & Co ..... $7.25; beveled..$7.75
Cohoes Mfg. Co ..... $7.25; beveled..$7.75
Lippincott or Mann's.
Single Bit, 4½ to 5½ and under.. ...℔ doz. $7.25 net
Single Bit, 4½ to 6 and over ..... ℔ doz. $7.75 net
Single Bit, beveled ..... 50c. doz. advance
Double Bit, 4½ to 5½ and under.... ℔ doz. $12.00 net
Double Bit, 4½ to 6 and over.... ℔ doz. $13.00 net
Double Bit, beveled ..... $1.00 ℔ doz. advance
Second quality Axes ..... 50 cts. less than above

### AXLES.

Sheldon & Co., iron ..... 55% off
" " " steel ..... 55% off
AXLE GREASE—Frazer's ..... ℔ lb. 6c.

### BALANCES.

Spring Balances ..... dis 25& 10%

### BELLS.

Hand, Light Brass ..... dis 70%
Hand, White Metal ..... dis 60%
Hand, Silver Chime ..... dis 20&10%
Hand, Globe (Cone's Patent ..... dis 25&10%
Gong, Abbe's ..... dis 20&10%
Gong, Yankee ..... dis 30&10%
Gong, Barton's ..... dis 30&10%
Leon Reading ..... dis 25&10&10%
Pull, Brook's ..... dis 50&10%
Crank, Taylor's ..... dis 25&10%
Lever, Sargent's ..... dis 55&10%
Bloomfield ..... dis 20%
Lever, R. & E. M. Co's ..... dis 45&10&2%
Call ..... dis 25%
Cow, Common Wrought ..... dis 55&10%
Cow, Western, Sargent's List ..... dis 55&10%
Cow, Kentucky, Sargent's List ..... dis 55&10%
Cow, Moore's or Dodge's, Genuine Ky., new list:
Nos. 0 1 1½ 2 3 5 5 6 Hog } dis. 60 &
$12 $10 $9 $8 $7 $4 $3.50 $2.50 $5 } 10%
Cow, Texas "Star" ..... dis 40%

### BELLOWS.

Blacksmith's Common ..... dis 50%
Molder's ..... dis 25%
Hand Bellows ..... dis 25%

### BLIND FASTENERS.

Francis ..... dis 20%
Mackrell's ..... ℔ doz pairs $1.00, dis 10%
Van Sand's Screw Pattern ..... $9 ℔ gross, net
Van Sand's Old Pattern. 1¼, $8; 1½, 8.50 ℔ gro. net
Merriman's ..... new list, net
Zimmerman's, 10¾ in ..... ℔ gross $26.00
Zimmerman's, 9 in ..... ℔ gross $24.00
Zimmerman's, without screws ..... $5.00 less

### BLIND STAPLES.

Barbed, ½ in. and larger ..... ℔ lb 11c net
Barbed, ⅜ in ..... ℔ lb 13c net

### BLOCKS.

Penfield Block Co., Rope and Iron Strap'd...dis 40%

### BOLTS.

Cast Iron Barrel Shutter, &c ..... dis 55&10%
Cast Iron Chain (Sargent's list) ..... dis 60&10%
Wrought Barrel ..... dis 55&10%
Wrought Square ..... dis 55&10%
Wrt. Shutter, all Iron, Stanley's list ..... dis 50&10%
Wrt. Shutter, Brass Knob, Stanley's list..dis 50&10%
Wrought Shutter, Sargent's list ..... dis 55&10%
Wrought Sunk Flush, Sargent's... ..dis 65&10&10%
Wrought Sunk Flush, Stanley's ..... dis 40&10%
Wrought B. K. Flush, Stanley's ..... dis 50&10%
Carriage and Tire, Common, new list ..... dis 75%
Carriage and Tire, Philadelphia Pattern ..... dis 50%
Carriage Bolts, Clarke's ..... dis 80%
Carriage Bolts, Lancaster Bolt Co.
Excelsior, Low List ..... dis 60&10&10%
Norway ..... dis 75%
R. B. & W. Carriage (old list) ..... dis 65%
Tire, American Screw Co's., Phila ..... dis 75%
Tire, "Bay State" ..... dis 65% new list
Eagle Philadelphia Tire Bolt ..... dis 80%
Stove ..... dis 60%
Plow ..... dis 50&10%
Machine ..... dis 70%
Bolt Ends and Lag Screws ..... dis 70%

### BORAX.

15c ℔ lb net.

### BRACES.

Q. S. Backus ..... dis 50%
Barber's ..... dis 40&5%
Spoffard's Patent ..... dis 50&5%
Ive's Patent Braces ..... dis 50%
Common Ball (American) ..... dis 55%
Amidon's ..... dis 50%

### BORING MACHINES—WITHOUT AUGERS.

Sweet & Clark upright, 3.60 angular ..... 4.40 net
Lawrence " 3.00 " ..... 3.50 net
Hubbard " 3.00 " ..... 3.20 net
Phillips, with Augers ..... 7.00 7.50 ..... net

### BRACKETS.

Shelf, plain ..... dis 50&10%
Shelf, fancy ..... dis 35&10%

### BRIGHT WIRE GOODS.

New list ..... dis 70&10%

### BULL RINGS.

Union Nut Co ..... dis 55%
Sargent's ..... dis 60&10%
Humason, Beckley & Co's. ..... dis 60&10%

### BUTTS.

Wrought Brass ..... dis 75%
Cast Brass, Fast Joint ..... dis 20&10%
Cast Brass, Loose Joint ..... dis 10&10%
Fast Joint, Narrow ..... dis 45&10&10%
Fast Joint, Broad ..... dis 45&10&10%
Loose Joint ..... dis 60&10&10%
Loose Joint, Japanned ..... dis 60&10&10%
Loose Joint, Jap, with Acorns ..... dis 60&10&10%
Parliament Butts ..... dis 60&10&10%
Mayer's Hinges ..... dis 60&10&10%
Loose Pin, no Acorn ..... dis 60&10&10%
Loose Pin, Acorns ..... dis 60&10&10%
Loose Pin, Acorns, Japanned ..... dis 60&10&10%
Loose Pin, Acorns, Jap'd, Plated ....
Tips ..... dis 60&10&10%

*Wrought Iron.*

Fast Joint, Narrow ..... dis 60&10%
Fast Joint, Lt. Narrow ..... dis 60&10%
Fast Joint, Broad ..... dis 60&10%
Loose Joint, Broad ..... dis 60&10%
Table Butts, Back Flaps, &c ..... dis 60&10%
Inside Blind, Regular ..... dis 60&10%
Inside Blind, Light ..... dis 60&10%
Loose Pin, Wrt ..... dis 60&10%
Loose Pin, Light ..... dis 60&10%
Spring Hinges—
Geer's Spring and Blank Butts ..... dis 25%
Clarke Hardware Co's ..... dis 50&10%
American Spring Hinge Co's ..... dis 25%
Gem Spring Hinges ..... dis 25%
Blind Butts, Shepard's, Nos. 50 and 60 ..... dis 70%
Blind Butts, Shepard's, No. 050. ..... dis 70&5%
Blind Butts, Shepard's No. 75 ..... dis 70&10%
Blind Butts, Lull & Porter ..... dis 75%
Blind Butts, Huffer ..... dis 50%
Blind Butts, Clark's, Nos. 1, 3, 5 ..... dis 70&10%
Standard Lull & Porter ..... dis 75%

### BOW PINS.

Humason, Beckley & Co's ..... dis 55&5%
Sargent & Co's ..... $19.70 and 21.40; dis 66&10%
Hotchkiss ..... dis 25%

### BUTCHER'S CLEAVERS.

Humason & Beckley Mfg. Co ..... dis 25%
Bradley's ..... dis 25%
Beatty's ..... dis 25&5%

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| $16.50 | 19.00 | 21.50 | 24.00 | 27.00 | 30.00 | 33.50 | 36.50 |

### CAN OPENERS.

American ..... ℔ gross $7.50, dis 10%
New Idea ..... $15.00 gross
No. 4, French ..... ℔ doz $2.25, dis 55%
No. 5, Iron Handle ..... ℔ gross $7.50, dis 10%
Sardine Scissors ..... ℔ doz $7.00, dis 55%
Sprague, No. 1, $2; No. 2, 2.25; No. 3, 2.50; dis 50&10%
Universa ..... ℔ doz $3.00, dis 33⅓%

### CAPS, PERCUSSION, ℔ 1,000.

U. M. C., F. C. trimmed ..... 50c } dis 10&10%
U. M. C., F. L. ground ..... 70c }
U. M. C., Cen. fire ground ..... 70c } dis 10&5%
U. M. C., Double W. Proof ..... $1.40 }
G. D. & S. B ..... 33c. dis 10%
E. B. 1-10, Eley's ..... 60c
Musket, in 1-10's ..... 55c
Hicks Ground Edge in Brass Boxes ..... 55c

### CARTRIDGES.

Rim ..... dis 50@10%
Central Fire, pistol size ..... dis 33⅓%
" " Military ..... dis 25 %
B. B. Caps, Round Balls ..... 1.75
" Swaged Conical ..... 1.90

### NEW LIST ON CARTRIDGES.

Rim-fire, 22 short.. ..... $ 5 long ..... $ 6.00
" 32 " ..... 10 " ..... 15.50
" 38 " ..... 18 " ..... 18.00
" 41 " ..... 15 " ..... 17.50
Central Fire—32, $11.00; 38, $13.50; 41, 15.00; 44, $19.

### CARDS.

Horse and Curry, new list, July, 1881 ..... dis 10%
Cotton, new list, July, 1881 ..... dis 10%
Wool, new list, July, 1881 ..... dis 10%

### CARPET STRETCHERS.

Cast Steel, Polished ..... ℔ doz $5.00, dis 30%
Cast Iron, Steel Points ..... ℔ doz $2.00, dis 50%
Bullard's ..... dis 25%

### CASTERS.

Bed ..... dis 47½&10%
Plate and Shallow Socket ..... dis 47½&10%
Deep Socket ..... dis 25&10%
Martin's Patent (Phœnix) ..... dis 25%

### CATTLE LEADERS.

Humason, Beckley & Co's ..... dis 60&10%
Sargent's ..... dis 60&10%
P. S. & W ..... dis 25&10%

### CHAIN.

German Halter and coil Chain ..... dis 50&10%
Trace, Breast and Fancy ..... dis 45&5%
Oneida Halter Chain (old list) ..... dis 45&5%
Galvanized Pump Chain ..... ℔ lb 8c net
Jack Chain, Iron ..... dis 60&10%
Jack Chain, Brass ..... dis 50&10%

### CHALK.

White ..... ℔ gross 60c net
Red ..... ℔ gross 85c net
Blue ..... ℔ gross $1.00 net
White Crayons ..... ℔ gross 9c net

### COTTON LINES.

Cotton Fish Lines ..... dis 33⅓%
Cotton Chalk Lines, 20 feet:

| Nos. 11, | 13, | 15, | 17, | 20, | dis 33⅓% |
|---|---|---|---|---|---|
| 3.20. | 3.60. | 4.00. | 4.50. | 5.25. | dis 33⅓% |

### CHISELS.

Socket Framing, Crossman ..... dis 65&5%
Socket Framing, P. S. & W ..... dis 70&10%
Socket Framing, Douglass' ..... dis 70&10%
Socket Firmers, Crossman ..... dis 65&5%
Socket Firmers, Ohio Tool Co ..... dis 60&10%
Socket Firmers, Douglass' ..... dis 70&10%
Socket Corner ..... dis 70&10%
Tanged Firmers ..... dis 40&45%
Tanged Firmers, Butcher's ..... $5.00@$5.25 to ℒ
I. Merrill's Socket and Framing Chisel...dis 65&10%

### CLAMPS.

Iron, Screw, Eagle ..... dis 50%
Iron, Adjustable, Stearns' ..... dis 20&10%
Iron, Cabinet, Sargent's ..... dis 65&10%
Iron, Carriage maker's, Carr & Crawley ..... dis 25%

### CLIPS, AXLE.

Norway or Best ..... dis 60&5%
Superior ..... dis 45&5%
Conestogo ..... dis 60&10%
Coal Hods—Griffiths' ..... dis 40%

### COCKS, BRASS.

Racking, new list, July 10, 1880 ..... dis 50&10%
Globe, new list, July 10, 1880 ..... dis 50&10%
Plain Bibbs, new list, July 10, 1880 ..... dis 50&10%
Ale and Beer, new list, July 10, 1880 ..... dis 50&10%

### COFFEE MILLS.

Parker's ..... dis 45%
Wilson's ..... dis 50%
Logan & Strobridge ..... dis 45%
Enterprise Mfg. Co ..... dis 25%

### COMPASSES, DIVIDERS, &c.

Compasses ..... dis 55%
Calipers ..... dis 55%
Dividers ..... dis 55%
Cook's Pencil ..... dis 10%

### COOPERS TOOLS.

Bradley's ..... dis 15@20%
Barton's ..... dis 20%

### CROW BARS.

Cast Steel ..... ℔ lb 6c
Iron, Steel Points ..... ℔ lb 4c

### CURLING IRONS, &c.

½, ⅝, ¾ in., $1.80, 2.00, 2.50 ..... dis 10%
Curling Tongs ..... ℔ doz $3.65, dis 10%
Pinching Irons ..... ℔ doz $7.50, dis 20%

### CURRY COMBS.

Fitch's new list ..... dis 50%
Hotchkiss, Novelty, new list, July, 1880 ..... dis 25%
Hotchkiss, Excelsior Superior Champion ..... dis 25%
Lawrence, "Perfect" ..... dis 25&10%
Rubber ..... ℔ doz $10.00, dis 25%
Sweet & Clarke ..... dis 50%
Lusters ..... dis 25%

### CURTAIN PINS.

Silvered Glass ..... net
White Enamel ..... net

### CUTLERY.

Association (Table) ..... net
Naugatuck Cutlery Co ..... list net
Excelsior Knife Co ..... net
Wilson's Butcher and Shoe Knives ..... dis 30%
Ames' Shoe Knives ..... dis 15%
Wm. Rogers Mfg. Co., Plated Cutlery ..... Net

### DOG COLLARS.

Embossed Gilt ..... dis 20%
Leather ..... dis 25%
Brass ..... dis 25%

### DOOR SPRINGS.

Torrey's Rod, regular size, ℔ doz., $3..dis 40&10%
Gem (Coil):
No. 1, Large Japanned ..... ℔ doz $4.00 }
No. 2, Medium Japanned .... ℔ doz 2.75 } dis 40%
No. 3, Small Japanned ..... ℔ doz 2.00 }
No. 4, ("Shoo Fly") Screen door size, 1.50 }
No. 5, Screen door size ..... 2.00 } dis 50%
No. 6, Medium ..... 2.75 }
No. 7 Large ..... 4.00 }
Standard—10 doz $1.25; 9 doz $1.75 ..... dis 50&10%
8 doz 2.50; 6 doz $3.50 ..... dis 50&10%
Hercules ..... dis 50&10%

### DRAWING KNIVES.

Ohio Tool Co ..... dis 60&10%
Crossman's No. 1 ..... dis 65&5%
Nobles Mfg. Co ..... dis 15%
Bradley's ..... dis 35%
Adjustable Handle ..... dis 20%
P. S. & W. ..... dis 70&10%
Douglass ..... dis 70&10%

### DRILLS AND DRILL STOCKS.

Blacksmiths' ..... each, $2.50, dis 10%
Blacksmiths' Self-Feeding ..... each, 7.50, dis 20%
Breast, P. S. & W ..... dis 20&10%
Breast, Wilson's ..... dis 20%
Breast, Millers Falls ..... each, $3.00, dis 25%
Breast, Bartholomew's ..... each, $2.50, dis 25&10%
Wilson's Drill Stocks ..... dis 10%
Automatic Boring Tools ..... each, $2.25, dis 20%

### EGG BEATERS.

Dover ..... ℔ doz $2.50, dis 2%
Medallion ..... gross, $10.00
Victoria ..... gross, $10.00

### EMERY AND EMERY PAPER.

Regular numbers ..... ℔ lb 6c
Flour and F. F ..... ℔ lb 4c
B. & A. Emery Paper ..... dis 30&5%

### ENAMELED AND TINNED WARE.

Kettles ..... dis 60%
Sauce Pans ..... dis 40%
Tinned Sauce Pans ..... dis 40%
Escutcheon Pins—Brass ..... dis 50%

### ESCUTCHEONS.

Door Lock ..... Same discounts as Door Locks
Brass Thread ..... dis 25%
Wood ..... dis 25%

### FAUCETS.

Fenn's ..... dis 40%
Fenn's Cork Stops ..... dis 33⅓%
Star ..... dis 55&10%
Frary's Patent Petroleum ..... dis 20&10%
West's Patent Key ..... dis 45%
Anchor Lock ..... dis 45%
Metallic Key, Leather Lined ..... dis 60%
Cork Lined ..... dis 70%
J. Sommer's Best Metallic Key ..... dis 40%
J. Sommer's Cork Lined, 1st quality ..... dis 50%

### FILES.

E. M. Boynton's ..... new list, dis 25%
Western File Co ..... dis 45%
Butcher's ..... $4.50 to ℒ
Moss & Gamble ..... $4.50 to ℒ
H. Disston & Sons (new list) ..... dis 40%
Heller Bros.' Horse Rasps ..... dis 30&10%
Nicholson ..... dis 50&10%
New American ..... dis 40%
Union File Co ..... dis 45%
Stubs, new list ..... $7.50 to ℒ, 25% off

### FLUTING MACHINES.

Knox, 4½-inch Rolls ..... $3.50 each }
Knox, 6-inch Rolls ..... $4.00 each } ..... dis 35%
Knox, 8-inch ..... $6.50
Eagle, 3½-inch Roll ..... $2.15, dis 35%
Eagle, 5½-inch Roll ..... 2.85, dis 35%
Crown, 4½-in., $3.50; 6, $4.00; 8, $6.50 each...dis 35%
Crown Jewell ..... 6-in., $3.40 each ..... dis 35%
American, 5-in., $3; 6-in., $3.40; 7-in., $4.50 each dis 35%
Domestic Fluter ..... $1.50 each, net
Geneva Hand Fluter, White Metal, ℔ doz $12 dis 25%
Crown Hand Fluter, Nos. 1, $15; 2, $12.50;
3, $10.50; 4, $8.25 ℔ doz ..... dis 35%
Combined Fluter and Sad Iron, ℔ doz $15.00, dis 30%

### FORKS.

Lawson & Brenizer ..... dis 50&10%
Remington ..... dis 50&10%
Sheble & Fisher ..... dis 50&10%

### FRY PANS.

Burnished list as follows ..... dis 60&10&10%

| No | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|
| ℔ doz... | $3.00 | 3.75 | 4.25 | 4.70 | 5.25 | 6.00 | 7.00 | 8.00 | 9.00 |

### GAUGES.

Marking, Stanley's ..... dis 50&10%
Marking, Chapin's ..... dis 55&10%
Wire ..... dis 10&10%
Wire, Disston's ..... dis 20%
Wire, Wheeler, Madden & Co ..... dis 10%

### GIMLETS.

Nail and Spike ..... dis 40%
"Eureka" Gimlets ..... dis 50%
"Diamond" Gimlets ..... dis 50%
Double Cut, Shepardson's ..... dis 50%
Double Cut, Hartwell's ..... dis 50%
Double Cut, Ives' ..... dis 50%
Double Cut, Douglass' ..... dis 33⅓%
"Reel" ..... ℔ gro. $12.00, dis 25%

### GLUE POTS.

Tinned and Enameled ..... dis 35%
Family, Howe's "Eureka" ..... dis 25%
Family, L. F. & C.'s "Handy" ..... dis 30%

### GRINDSTONE FIXTURES.

Sargent's Patent ..... dis 70&10%
Reading Hardware Co ..... dis 25&10%

### GUN WADS.

Eley's B. E. wads, 11 upwards ..... $1.75
" " " 9 and 10 ..... 2.00
" " " 7 " 8 ..... 2.25
" P. E. " 11 upwards ..... 2.90
" " " 9 and 10 ..... 3.65
" " " 7 " 8 ..... 4.45

### HAMMERS.

Maydole's ..... dis 15%
Hartford Hammer Co ..... dis 25%
Magn'c Tack, Nos. 1,2,3, 1.26, 1.50 and 1.75..dis 25&10%
Warner & Noble's ..... dis 5%
Kip's or Selsor's ..... dis 30%
Yerkes & Plumb ..... dis 15%

HANDLES.—Door or Thumb Latches.

Nos ..... 0 1 2 3 4
Per doz..$0.80 1.00 1.18 1.35 1.50. ..... dis 55&10%
Roggin's Latches ..... ℔ doz 35c.@40c. net
Bronze Iron Drop Latches ..... ℔ doz $0.90@1.10
Jap'd Store Door Handles—Nuts, $1.25; Plate, $2.00; no Plate, $1.10 ..... dis 10%
Barn Door ..... ℔ doz $1.60, dis 10%
Wrought Chest ..... dis 65&10%
Surface Chest ..... dis 55&10%
Flush Chest ..... dis 55&10%
Lifting ..... dis 50&10%
Saw and Plane ..... dis 40&10%
Lippincott Cross-Cut Saw ..... 22c. per pair
Hammer and Hatchet ..... dis 20%
Brad Awl ..... ℔ gross, $3.00, dis 20&10%
Chisel, all kinds ..... dis 50&10%
Auger, assorted, ℔ gross ..... $4.50
Auger, large, ℔ gross ..... 5.00
Patent Auger, Ives' ..... dis 25%
Patent Auger, Douglass' ..... ℔ set $1.25 net
Patent Auger, Swan's ..... ℔ set 1.00 net

### HAMMOCK CHAIRS.

White Mountain, per doz ..... $36.00
" " Finished in red, per doz ..... $42.00

### HANGERS.

Barn Door, old patterns ..... dis 60&10%
Barn Door, New England ..... dis 60&10%
Climax (Anti-Friction) ..... dis 50%
Warner's ..... dis 20%
Richard's ..... dis 20%

### HATCHETS.

Shingling, Nos. 1 2 3 ..... ℔ doz $7.25 $8.00 $8.75
Claw, Nos. 1 2 3 ..... ℔ doz 7.75 8.50 9.25
Lathing, Nos. 1 2 3 ..... ℔ doz 7.50 8.00 8.50
Hammond's new list ..... dis 45%
Blood's ..... dis 35%
Hunt's ..... dis 30%
Russel's, low list ..... dis 40%
Cohoes Bench Broad Adzes ..... 40%

### HAY KNIVES.

"Lightning" ..... ℔ doz $20.00 net-5%
Wadsworth's ..... dis 30%

### HINGES

Plate Hinges } 8, 10 & 12 in ..... 5½c. ℔ lb.
"Providence" } over 12 ..... 4½c. ℔ lb.
Screw Hook } 8, 10, 12 in ..... 4 c. ℔ lb.
and Strap. } 14 to 36 in ..... 3 c. ℔ lb.
Crown spring hinges, for screen doors, dis 60%; for for solid doors, single action, dis 45%; for solid doors, double action, dis 55%.
Crown Screen Door Latch ..... ℔ gross $12, dis 55%
Crown Christmas-Tree Holders, 2-inch, ℔ doz $9; 3-inch, $12 ..... dis 45%
Rickford Portable Pump ..... each $6, dis 20%
American Cake Mixer, No. 6 ..... each $3.50, dis 20%
American Tobacco Cutter ..... ℔ doz $15, dis 30%
A. M. Co. Clothes Wringer, No. 2 rolls, 10x1¾, ℔ doz $37.50; No. 2½ rolls, 12x1¾, $48 ..... dis 20%
Heavy Welded Hook } 8@12 in. $7.50 ℔ 100 lb. } dis
} 14 in. & up, $6 ℔ 100 lb. } 20%
Screw Hook and Eye... } ⅝ & 1 in ..... 9c. } dis
} ¾ in ..... 9c. } 20%
} ⅞ in ..... 10c. }
} ½ in ..... 12c. }
Wrought Strap & T list, Dec. 20, '77, dis 60&10&10%

### HOES.

Planters ..... 60&5%
Riveted Shank ..... ℔ doz $5.00, dis 50&10
Socket ..... ℔ doz $5.25, dis 50&10%
Grub ..... dis 50%
Hick's Pat. Solid C. S. Planters' ..... dis 60&10%
Hick's Pat. Solid C. S. Scovill Pattern ..... dis 60&5%
Hubbard, Bakewell & Co— ..... dis 50&10%

### HORSE NAILS.

Ausable: Nos. 5 6 7 8 9 10
Plain, ℔ lb....30c 27c 25c 24c 23c 22c..dis 20&10%
Finish'd ℔ lb. 31c 28c 26c 25c 24c 23c..dis 20&10%
Clint'n, P'n, " .... 23c 21c 20c 19c 18c..dis 20&10%
Clint'n, Fin'd " ... 24c 22c 21c 20c 19c..dis 20&10%
Essex, ℔ lb.....31c 28c 26c 25c 24c 23c..dis.... 30%
Putnam " .....27c 24c 22c 21c 20c 19c...dis 5&10%
Saranac " .....26c 23c 21c 20c 19c 18c.....dis 20%
Globe, " .....26c 23c 21c 20c 19c 18c..dis 10&5%
N'thw'n " .....28c 25c 23c 22c 21c 20c.dis 10&10%
Champlain
Forged ℔ lb...30c 27c 25c 24c 23c 22c.dis 25&10%
A. C., ℔ lb.....28 25 23 22 21 21.dis 10,10&5%
C. B. }
K. } .....28c 25c 23c 22c 21c 21c..dis 10&5%
Bridgewater.....24c 21c 19c 18c 17c 16c..dis 25&5%
New Haven.....33c 30c 28c 27c 26c 25c.dis 30&10%
Capewell.....31c 26c 26c 25c 24c 23c.dis 20&10%

### HORSE SHOES.

Burden ..... ℔ keg $2.87½
R. I. Horse Shoe Co., Perkin's Improved, Light, Medium and Heavy ..... ℔ keg $3.87½
Mule Shoes ..... ℔ keg $4.87½
Walker's—Forged: (Light, Medium and Heavy.)
Horse ..... ℔ keg $3.87½
Mule ..... ℔ keg $4.87½
Keystone Solid Calk Steel Horse ..... $3.87½ 5%
" " " " Mule ..... $4.87½ 5%

### HORSE POKES.

Excelsior ..... $8 ℔ doz.
Akron ..... $3 ℔ doz.
Ox SHOES—Mt. Carmel Ox Shoes ..... 10 cts. ℔ lb.

### ICE CREAM FREEZERS.

Peerless—3 quart, $4.50; 4 quart, $5.50; 6 quart, $7; 8 quart, $9; 10 quart, $12. The Grooch Patent "Giant"—14 quart, $20; 18 quart, $25; 21 quart, $30; 25 quart, $35; 32 quart, $40; 42 quart, $45. Discount 50%.
American—2 quart, $2.75; 3 quart, $3.25; 4 quart, $3.75; 6 quart, $5 each ..... dis 45%
Crown, single action, 2 quart, $3.75; 3 quart, $4.50; 4 quart, $5.50; 6 quart, $7; 8 quart, $9; 10 quart, $11; 14 quart, $14 ..... dis 45%
Crown, double action, with crank, 8 quart, $10.50; 10 quart, $13; 14 quart, $16.50; 18 quart, $21; 24 quart, $25. With fly wheel, 8 quart, $13; 10 quart, $16; 14 quart, $20; 18 quart, $25; 24 quart, $30; 32 quart, $37.50 ..... dis 45%
Star, doubje action, 2 quart, $3.75; 3 quart, $4.50; 4 quart, $5.50; 6 quart, $7; 8 quart, $9; 10 quart, $11; 14 quart, $14 ..... dis 45%
Gem, double action, 2 quart, $3.75; 3 quart, $4.50; 4 quart, $5.50; 6 quart, $7; 8 quart, $9; 10 quart, $11; 14 quart, $14 ..... dis 55%
Crown Ice Chipper ..... ℔ doz $7.50, dis 35%

### KNOBS.

Carriage, (Jap'd 80 c ℔ gross) ..... dis 60&10%
Base—Common ..... dis 30&10%
Hemacite Door Knobs ..... new list, dis 35&5%
Door Mineral ..... } Same discounts as Door Locks.
Door Por. Jap'd.. }
Door Por. Plated. }
Door Por ..... }
Furniture Plain ..... 75c gross inch, dis 10%
Furniture, Wood Screws ..... dis 20%
Picture ..... dis 50&10%
Hemacite, Picture ..... dis 35%
Shutter, Porcelain ..... dis 50&10%

### LADLES.

Melting & Skim'ng, Monroe's Pat. ℔ doz $4..dis 40%
Melting, C & C ..... dis 30&10%

LAWN MOWERS.

Buckeye, Easy and Excelsior, new list. .....dis 30 %

LINES.

Linen Fish.....dis 25&10 %
Wire Clothes, Galvanized, 100 feet.....℔ doz $3.00

LOCKS AND LATCHES.

Cabinet, Eagle..... } Changes made in list price
Cabinet, Gaylord..... } of some numbers Jan. 1,
Cabinet, Bridgeport..... } 1881, dis 25&2 %
Cabinet, P. & F. Corbin.....dis 40 %
Trunk, new list, Jan 1, 1881.....dis 15&2 %
Yale Lock Co., Flat Key.....dis 40 %
Plate.....dis 33⅓&2 %

DOOR LOCKS, ETC.

Bradford..... } List prices as revised
Norwalk..... } Dec. 6th, 60&2%
Norwich..... } for cash.
P. & F. Corbin..... }
Russell & Erwin..... }
Mallory, Wheeler & Co.... }
Padlocks—Russell & Erwin..... }
Mallory, Wheeler & Co..... . } dis 45 %
Norwich Lock Manf. Co..... } and 2% for cash.
Wm. Wilcox & Co..... }
Wm. Wilcox & Co's Plate Locks .....dis 33⅓ %
Yale Lock Manf. Co's "Standard".....dis 40 %
Romer's.....dis 25@40 %
Conestoga.....dis 75 %
Scandinavian, "Norwich".....dis 50&10 %

MALLETS.

Penfield Block Co., Apple, Hickory and Lignumvitæ.....dis 30 %

MEAT CUTTERS.

Dixon's (P. S. & W.) Nos. 1 2 3 4.
℔ doz $14 $17 $19 $30–dis 35 %
Perry's, Nos. 1 2 3 4 4 gr'd 5 gr'd
Each.....$3 4 5 11 13 36 dis
Woodruff's (P. S. & W.).....Nos. 100 150
℔ doz. $15 18-dis 35 %
Hales'.....Nos. 11 12 13
℔ doz. $27 35 45–dis 50&10&2 %
Kieser's No. 55.....$40 ℔ doz dis 40 %
Kieser's Gem.....$25 ℔ doz dis 40 %
Kieser's No. 82.....$40 ℔ doz dis 40 %
Kieser's Monarch.....$45 ℔ doz dis 40 %
Beef Shaver, (Enterprise Manf. Co.).....dis 25 %

MOLASSES GATES.

Stebbins Patterns.....dis 70&10 %
Stebbins Genuine.....dis 67½&10 %
Stebbins Tinned Ends.....dis 40&10 %
Chase's Hard Metal.....dis 50&10 %
Self-Measuring, (Enterprise).....dis 20 %
Lincoln's Pattern.....dis 60&10 %
Weed's.....dis 15 %
Boss Nos. 1 2 3 4
$7 $8 $9 10....℔ doz
Boss, Japanned Finish.....dis 60&10&10 %
" Bronze Finish.....dis 50&10&10 %

NUTS AND WASHERS.

Square Nuts.....8 c off list.
Hexagon Nuts.....8½c off list.
Washers.....7½c off list.

OILERS.

Zinc and Tin.....dis 60&10 %
Brass and Copper.....dis 50 %
Malleable (Hammer's).....℔ doz $5, dis 10 %

PINKING IRONS.

Per dozen.....75 cts. net

PLAITING MACHINES.

Astor Plaiting Machine.....each $15, dis 20 %
Crown Plaiting Machines.....dis 25 %
6 in., $6; 10 in. $8 each.

PLANES AND PLANE IRONS.

Bench, First Quality.....dis 20 %
Bench, Second Quality.....dis 25 %
Molding.....dis 15 %
Bailey's (Stanley R. & L. Co.) New list, Jan. 1879 dis 20&10 %
The Stanley (S. R. & L. Co.) new list, January 1879.....dis 20&10 %
Bailey's.....dis 20&10 %
Plane Irons, Butcher's.....$5.50 to £
Plane Irons, Auburn Tool Co.....dis 20 %
Plane Iron, Ohio Tool Co.....dis 20 %
Plane Irons, Sandusky Tool Co.....dis 20 %

PLIERS AND NIPPERS

Button's Patent.....dis 33⅓ %
Hall's Pat. Compound Lever Cutting Nippers, No. 2, 5 in. $13 50; No. 4, 7 in., $21 ℔ doz..dis 25 %
Gas Pliers.....dis 50 %

PLUMBS AND LEVELS.

Disston's.....dis 40 %
Stanley R. & L. Co.'s Pat. Adjustable....dis 65&10 %
Stanley R. & L. Co.'s Non-Adjustable....dis 65&10 %
Chapin's Patent Adjustable.....dis 65&10 %
Chapin's Non-adjustable.....dis 65&10 %
Standard Rule Co.'s New Adjustable.....dis 65&10 %
Standard Rule Co.'s Non- Adjustable.....dis 65&10 %
Pocket Levels.....dis 65&10 %

RAIL.

Sliding Door, Wrought Brass.....℔ ft. 43c. dis 30 %
Sliding Door, Bronzed Wrt. Iron...℔ ft. 12c. dis 35 %
Sliding Door, Iron, Painted.....℔ ft. 4c. dis 10&10 %
Barn Door....inch..... ½ ⅝ ¾
Per 100 feet..$2.60 3.60 5.60–dis 10 %
B. D. for N. E. Hangers— Small. Med. Large.
Per 100 feet.....$2.10 2.70 .30 net.

RIVETS.

Iron and Tinned, new list, Dec. 10, 1881.....dis 40 %
In bulk, new list, Dec. 10, 1881.....dis 40 %
Copper Rivets and Burrs.....dis 45 %
Nos. 7 8 9 10 11 12 13 14 15
℔ lb.. 49c. 50c 52c. 54c. 56c. 58c. 60c. 65c. 70c.
RIVET SETS.....dis 40 %

RODS.

Stair, Brass.....dis 25 %
Stair, Black Walnut.....60c. ℔ doz.—net

RULES.

Boxwood. Ivory.
Chapin's..... } dis 70&10 % } dis 40&10 %
Standard..... }
Stanley..... }
Stevens & Co.....dis 70&10%. Ivory.....dis 50 %
Stevens & Co. Miscellaneous.....dis 50&10 %

SAD IRONS.

Self-Heating, Charcoal.....℔ doz 9.00 net
Mrs. Pott's Irons.....dis 35 %
Enterprise Star Irons, new list, July 20, '82....dis 35 %
Comb'd Fluter and Sad Iron....℔ doz $15.00, dis 15 %
Common Sad Irons.....2¾c ℔ lb

SAND PAPER.

Baeder & Adamson's Flint, 00@1½..$4.50 ℔ r'm. }
Baeder & Adamson's Flint, 2, 2½&3..5.00 ℔ r'm. }
Baeder & Adamson's Flint, Assort'd 4.75 ℔ r'm. } dis 35 %
Baeder & Adamson's Star..... 3.75 ℔ r'm. }
Baeder & Adamson's Emery ℔ r'm $6.50@11.50 }
J. Bartle's Sand, Flint and Emery Paper ..dis 30&5 %

SASH CORD.

Common.....℔ lb, 14c. net
Patent.....℔ lb, 17c@18c. net
Silver Braided Lake Hemp.....℔ lb, 50c, dis 10 %
Silver Braid, Lake White Cotton, ℔ lb, 50c. dis 10 %
Silver Braided Lake Drab Cotton, ℔ lb. 55c. dis 10 %
Silver Lake Cable Laid, Bengall Unbleached Hemp, 17 cts.....dis 10 %
Russian Hemp, 19 cts.....dis 10 %
Italian Hemp, 34 cts.....dis 10 %

SASH WEIGHTS.

Solid Eyes, in 500-lb. lots and over, ℔ lb. 1¼c. net

SAUSAGE STUFFERS OR FILLERS.

Miles.....℔ doz. $20, dis 25&5 %
Perry.....℔ doz., No. 13; No. 0, $21....dis 35 %

Enterprise Mfg. Co.....dis 25 %
Monarch.....dis 40 %

SAWS.

Boynton's Lightning Cross Cuts, new list....dis 40 %
Boynton's Circular and Mill.....dis 40 %
Boynton's Ice.....dis 25 %
Boynton's Lightning Hand, Panel and Rip...dis 25 %
Disston's Circular.....dis 40 %
Disston's Mill.....dis 40 %
Disston's Cross Cut.....dis 40 %
Disston's Hand, Panel, Rip, &c.....dis 20 %
Hubbard, Bakewell & Co. Circular Saws...dis 40&5 %
Hubbard, Bakewell & Co. Cross Cut.....30c. ft.
Hubbard, Bakewell & Co., One-Man's, X Cut dis 40&5 %
Hubbard, Bakewell & Co., Mill Saws. ....dis 40&5 %
Peace Circular and Mill.....dis 40 %
Peace Hand, Panel and Rip.....dis 25 %
Peace Cross Cuts.....dis 35 %
Peace Hand Saws, all widths.....dis 10 %
Webster Cross Cut, with handles,....dis 25&10&10 %
Griffin's Hack Saws and Blades.....dis 30 %

SAW FRAMES.

White.....℔ doz $1.05, dis 10 %
Saw Rods.....$10 list, dis 10&10 %

SAW SETS.

Stillman's Genuine, ℔ doz $3.50 and $5.50....dis 10 %
Stillman's Imitation.....℔ doz $3.25, dis 30&10 %
Common Lever.....℔ doz $2.00, dis 30&10 %
Leach's.....No. 0, $8.00; No. 1, $15; dis 15 %
Hammer, Hotchkiss.....$5.50, dis 10 %
Aiken's Genuine.....$13.00, dis 50&10 %
Aiken's Imitation.....$7.00, dis 50 %
Disston's.....dis 20 %
Morrill's.....No. 1, $15; No. 5, $52; dis 35&10 %

SCALES.

Hatch, Counter, No. 171....℔ doz $42, dis 37½&10 %
Hatch, Tea, No. 161.....℔ doz $15.00, dis 37½&10 %
Union Platform, Keystone.....$6, dis 45 %
Chicago Scale Co.....Special dis
Fairbanks'.....dis 20 %
Forsyth Scale Co.....dis 45 %
Howe's.....dis 20&10 %
Chatillon's Grocers'.....dis 40 %
Chatillon's Eureka.....dis 25 %
Family Universal.....dis 50 %
Family Favorite.....dis 30 %
Family Turnbull's.....dis 30 %
Scale Beams, List of Jan. 12, 1882.....dis 50 %

SCRAPERS.

Adjust. Box Scraper (S. R. & L Co.) $6.50, dis 20&10 %
Box, 1 Handle.....℔ doz $4, dis 10 %
Box, 2 Handle.....℔ doz $6, dis 10 %
Foot.....dis 45&10 %
Ship, common.....℔ doz $3, net
Wilson Mfg. Co.....dis 10 %

SCREW DRIVERS.

Douglas Mfg. Co.....dis 20&10 %
Disston's.....dis 40 %
Cowles Mfg. Co.....dis 50&10&10 %
Stanley Rule & Level Co's. Var. Hdls... dis 50&10 %
Stanley Rule & Level Co.'s Black Hdls...dis 40&10 %
Ratchet.....dis 33⅓ %
Clark's Patent.....dis 25 %
Shepardson.....dis 25 %

SCREWS.

Flat Head Iron, list Dec. 27, '82.....dis 70 %
Round Head Iron.....dis 50 %
Flat Head Brass.....dis 60 %
Round Head Brass.....dis 15 %
Flat Head Blued, add 2½ % to net of invoice.
Brass and Silver Capped.....dis 40 %
Japanned, list of Plain Screws.....dis 20 %
Coach, Patent Gimlet Point.....dis 60&10 %
Coach, Common or Lag.....dis 60&10&10 %
Bed.....dis 10 %
Machine, Flat Head, Iron.....dis 55 %
Machine, Round Head, Iron.....dis 50 %
Bench, Iron.....dis 50&10 %
Bench, Wood, Beach.....℔ doz $3.00, dis 10 %
Bench, Wood, Hickory.....dis 20&10 %
Hand, Wood.....dis 20&10 %
Hand Rail, Sargent's.....dis 60&10 %
Hand Rail, Humason, Beckley & Co.'s...dis 40&10 %
Hand Rail, Am. Screw Co., list Jan. 1, '81....dis 70 %
Jack (Wilson's).....dis 25 %

SCREEN FRAMES AND FIXTURES.

Standard Window Screens No. 1, ℔ doz $4; 2, $5
" Door " No. 5, $15; dis 40&10 %
" Window Corner Irons, No. 3, doz. st's, $2
" Door " " No. 6, " " $3
dis 40&10 %
" Door Latches, ℔ dozen, $3.60.....dis 50 %
Porter's Patent Window and Door Screen Frames:

PER DOZ. SETS.

| | In White. | Im. Bl'k Walnut. | |
|---|---|---|---|
| No. 20 | $2.75 | $3.25 | dis 33⅓ % |
| No. 21 | 2.25 | 4.00 | |
| No. 22 | 5.50 | 6.75 | |
| No. 23 | 6.00 | 7.50 | |
| No. 30 | 9.00 | 11.00 | |

Porter's Corners—
No. 0. Corners and Sticks complete for a three-foot window, ℔ doz sets.....$4
No. 1. Set for Window, ℔ doz sets Bronzed, $2.40; Nickel, $5.62
No. 1½. " " ℔ doz sets, Bronzed, $3.25; Nickel, $7.50
No. 4. " " ℔ doz sets, Bronzed $4.00; Nickel, $8.00
No. ½. " " or door, ℔ doz sets, Bronzed, $1.20; Nickel, $3.00
No. 4½. " " or Door, ℔ doz sets, Bronzed, $2.00; Nickel, $4.00
No. 2½. " Door, ℔ doz sets, Bronzed, $6.75; Nickel, $15.00
No. 3. " " ℔ doz sets, Bronzed, $12.00; Nickel, $24.00
} dis 33⅓ %

SHEARS AND SCISSORS.

American (Cast) Iron.....dis 70&10 %
Pruning.....see Pruning Hooks and Shears
Barnard's Lamp Trimmers.....℔ doz $4.00
Tinners'.....dis 15 %
Conn Shears.....dis 80 %
Norfolk Shear Co.....dis 75 %
Jersey Shears.....dis 80 %
J. Wiss & Son, Nickle, 50&5 %; Japanned, 60&5 %

SHEAVES.

Sliding Door, M. W. & Co., List.....dis 45&2 %
Sliding Door, R. & E. list.....dis 60&10&2 %
Sliding Door, Patent Roller.....dis 60&10&2 %
Sliding Door, Pt. Roller, Hatfield's...dis 60&10&2 %
Sliding Door, Russell's Anti-Friction..dis 60&10&2 %
Also see Hangers.

SHOVELS AND SPADES.

Ames, New List, July 1, 188r.....dis 15 %
Griffiths.....dis 50&5 %
Remington's (Lowman's Patent).....dis 30 %
Rowland's.....dis 60 %
Kimballs.....dis 35 %
Lippincott, new list.....dis 20 %
Hussy, Bins & Co.....dis 15 %

SPOKE TRIMMERS.

Bonney's.....℔ doz $10, dis 40&5 %
Stearns'.....℔ doz $9, dis 20&10 %
Ives'.....No. 1, $15; No. 2, $12 ℔ doz, dis 55&10 %
Douglass'.....℔ doz $9, dis 15 %

SILVER PLATED WARE.

Wm. Rogers Manf. Co.....dis 50, 5&5 %
Holmes, Booth & Hayden.....dis 40&10&5 %
Brown Bros.....dis 40&10&5 %
Wallace's Steel Silver Plated.....dis 33⅓&10 %
Rogers Bros 1847.....dis 50 %
C. Rogers & Bro.....dis 40, 10&5 %

SILVER PLATED HOLLOW WARE.

Wm. Rogers Manf. Co.....dis 40, 15&5 %
Meriden Brittania Co.....dis 33⅓ %

SPOONS.

Britannia.....dis 60&10 %
Tinned, Iron, Table and Tea.....dis 65 %
Tinned Iron Basting.....dis 65 %
German Silver.....dis 40 %

STONE.

Hindostan No. 1, 5c.; Axe, 8c.....net
Sand Stone.....℔ lb, 6c., dis 33⅓&10 %
Washita Stone.....No. 1, ℔ lb., 16c. net
Washita Stone, Slips.....No. 1, ℔ lb., 45c. net
Arkansas.....$1.50 ℔ lb. net

SQUARES.

Steel.....dis 50 %; full cases, dis 50&10 % } 2% cash.
Iron.....dis 50 %; full cases, dis 50&10 % }
Nickel Plated.....add $2.50&$4 ℔ doz net. }
Try Square and T Bevels.....dis 50&10 %
Disston's Try Square and T Bevels.....dis 40 %

TACKS, BRADS, &C.

New List, Sept. 1, 1882.

Tinned Swedes Tacks.....dis 30 %
Tinned American Tacks.....dis 30 %
Swedes Tacks, all kinds.....dis 30 %
American Cut Tacks.....dis 30 %
Copper Tacks and Nails.....dis 30 %
Hungarian Nails.....dis 35 %
Gimp and Lace Tacks.....dis 30 %
Gimp and Lace Tacks, Tinned.....dis 30 %
Finishing Nails.....dis 25 %
Trunk and Clout Nails.....dis 25 %
Common and Patent Brads.....dis 20 %
Basket Nails.....dis 20 %
Brush Tacks.....dis 20 %
Leathered Carpet Tacks.....dis 20 %
Cigar Box Nails.....dis 20 %
Chair Nails.....dis 20 %
Double-pointed Tacks.....dis 40&5 %
} Extra 10 % on all for cash.

TAP BORERS.

Common and Ring.....dis 20 %
Ives' Tap Borers.....dis 15&10 %
Enterprise Mfg. Co.....dis 25 %

TOBACCO CUTTERS.

Enterprise Mfg. Co (Champion).....dis 25 %
Wood Bottom.....℔ doz $12.00, dis 40&5 %
All Iron.....℔ doz $9.50, dis 40&5 %
Wilson's.....dis 35 %

THERMOMETERS.

Tin Case.....dis 75&10 %
Storm Glasses.....$3.25 ℔ doz.

TOE CALKS.

Winsted.....℔ lb 9c. dis 5 %

TRAPS.

Game, Newhouse.....dis 35 %
Game, Oneida Pattern.....dis 60&10 %
Game, Blake's Patent.....dis 40&10 %
Mouse, Wood, Choker.....℔ doz holes, 16c
Mouse, Round Wire.....℔ doz $1.50, dis 10 %
Mouse Cage, Wire.....℔ doz $2.50, dis 10 %
Mouse, Catch-em-alive.....℔ doz $2.50, dis 10 %
Cyclon Mouse.....℔ doz 75 cts.
Ideal Mouse.....℔ doz $1.00
Rat, "Decoy".....℔ doz $10.00, dis 10 %
Delusion Mouse, per doz.....$1.50

TROWELS.

Lothrops' Brick and Plastering.....dis 25 %
Reed's Brick and Plastering.....dis 15 %
Disston's Brick and Plastering.....dis 20 %
Clement & Maynard's.....dis 20 %
Worrall's Brick.....dis 20 %
Brades & Walby's.....dis 20 %
Garden.....dis 55 %

TRUCKS (WAREHOUSE, &C.)

Handy Truck.....$2.50 net
Penfield Block Co.' list, 1882.....dis 35 %
Peerless, with Cogs, No. 3.....54.00
Peerless, with Cogs, No. 4.....66.00
Eureka, No. 2.....℔ doz 42.00

VISES.

Solid Box—Wilson's.....dis 50 %
" Trenton.....dis 45 %
" Iron City Tool Works.....dis 50 %
Bench—Wilson's.....dis 45 %
" Trenton.....dis 25 %
" Parker's.....dis 20 %
" Prentiss.....dis 25 %
" Bonney's.....dis 35 %
Well Wheels.....dis 60&10&10 %

WIRE.

Brass and Copper, list of Jan. 17, 1884.....dis 15 %
Bright and Annealed.....Nos. 0@18, dis 50&10 %
Bright and Annealed.....Nos. 19@26, dis 60&10 %
Bright and Annealed.....Nos. 27@36, dis 70 %
Coppered.....Nos. 0@18, dis 50 %
Galvanized, Nos. 0 to 18.....Market list dis 40 %
Tinned, Nos. 0 to 18.....dis 60 %
Tinned Broom Wire, Nos. 18 to 25.....dis 60 %
Annealed Fence, Nos. 8&9.....dis 55 %
Annealed Grape, Nos. 10 to 14.....dis 50@10 %
Fence Staples, Galvanized.....℔ lb 7@7¼c
Japanned Barb Fence.....℔ lb 6 c
Galvanized Barbed Fence.....℔ lb 6¾c
Buck Thorn Galvanized.....℔ lb 6¾c
Picture Wire.....dis 40 %
Clothes Line Wire, Galvanized.....$3.00 ℔ doz
Wire Cloth, green, drab and black....℔ sq ft 2 c net

WRENCHES.

American Adjustable.....dis 45 %
Baxter's Adjustable "S," list Jan., 1880...dis 20&5 %
Baxter's Diagonal.....dis 20&5 %
Coes' Genuine.....dis 60 %
Coes' "Mechanics".....dis 60&10 %
Coes' Pattern, Malleable.....dis 75 %
Coes' Pattern, Wrought.....dis 60&10 %
Girard Standard.....dis 50&10 %
Girard Agl.....dis 60&10 %
Always Ready.....$9.00—25 %

WRINGERS. Per doz.

Universal, XX, No. 2½..... 36.00
Universal, XX, No. 2..... 42.00
Universal, XX, No. 1½..... 51.00
Universal, XX, No. 1..... 66.00
Universal, XX, No. 8,.....each 10.75
Universal, XX, No. 12.....each 20.25
Universal, XX, No. 18.....each 22.75
Universal, XX, No. 22.....each 30.25
Peerless, no Cogs, No. 1..... 42.00
Peerless, with Cogs, No. 2½..... 45.00
Peerless, with Cogs, No. 2..... 48.00

MISCELLANEOUS.

"Diamond" Vegetable Grater.....$5.00 ℔ doz., 10 %
Rotary Knife Potato Parer.....$18.00 ℔ doz., net
Metallic Shingles.....$5.50 and $6.50 per square.
Hopper Cherry Seeders.....$5.00 ℔ doz, net

COVERT'S GOODS.

Loop Harness Snaps.....dis 50 %
Martingale Loop Snaps.....dis 50 %
Round Eye " .....dis 50&10 %
Round Eye Swivel " .....dis 50 %
Loop Swivel " .....dis 50 %
Open Eye " .....dis 40 %
Strap Eye " .....dis 40 %
Leather Horse Ties.....dis 35 %
Snap and Thimbles.....dis 50&10 %
Thimbles.....dis 50&10 %
Hammock Ropes.....dis 60 %
Horse Tie (Snap and Thimble) Hemp.....dis 50 %
" " " " " Jute.....dis 50&10 %
Cattle " " " " Hemp.....dis 50 %
" " " " " Jute.....dis 50&10 %
Lariat Tether.....dis 50 %
Picket Pins.....dis 40 %
Horse Tie. O. K.....dis 50&10 %
Cattle " " .....dis 50&10 %
Web Halters.....dis 50@10 %
Rope " .....dis 50& 5 %
Driving Reins.....dis 40 %
Weight Cords.....dis 35 %
Hitching Weights.....dis 35 %
Breast Chains.....dis 35 %
" " .....dis 35 %
" " .....dis 35 %
Post Chains.....dis 50&10 %
Halter Chain.....dis 50 %
Rein Chain.....dis 50 %
Martingale Chain.....dis 50 %
Rod Post Hitcher.....dis 50&10 %
Lytle Bull Leads.....dis 40 %
Bull Snaps.....dis 40 %
Soldering Irons.....dis 35 %
" Coppers.....dis 35 %
Hitching Cords.....dis 35 %
Halter Leads (Hemp).....dis 50 %
" " (Jute).....dis 50&10 %
Horse Tail Holders.....dis 20 %
"New" Patent Round Eye Snap.....dis 35 %
"New" Patent Snap.....dis 35 %


# THE WM. ROGERS' MFG. CO.

# Silver-Plated ❄ Table ❄ Ware,

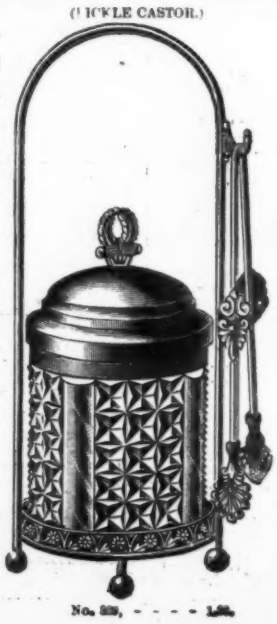
We manufacture a complete line of Silver-Plated Table Ware of all descriptions, and should be pleased to send our Price-List or Catalogue to any reliable dealer.

☞ We guarantee every piece of our ware to be just as represented.

Our guarantee card accompanies each box of goods.

Our prices are as low as any FIRST-CLASS GOODS, and our goods are equal to any made in the country.

(PICKLE CASTOR.)



No. 829, - - - - Lge.

Trade Marks:

Wm. Rogers & Son.

—AND—

1865 Wm. Rogers Mfg. Co.

P. O. Address, Drawer 30,

HARTFORD, CONN.

# PLATT BROTHERS & CO.

(LIMITED,)

## MACHINISTS,

**HARTFORD WORKS, OLDHAM, LANCASHIRE,**

**Beg to Call the Attention of Worsted Spinners and Manufacturers to their Improved Machinery for**

## Carding, Combing, Preparing, Spinning AND Weaving Worsted

ON THE FRENCH SYSTEM.

**PLATT BROTHERS & CO., Limited, are also Makers of the following Machinery:**

New Patent Cleaning Machines for Cotton.
Crighton's Patent Opening Machines for Cotton.
Hard Waste Breaking-up Machinery.
Patent Burring Machines for Wool.
Machinery for Preparing, Spinning and Doubling Cotton, Wool, Worsted and Silk.
Ring Spinning and Doubling Machines.
Combing Machines for Cotton—Heilman's or Whipple's Patent.
Patent Brick-making Machinery.
Combing Machines for Wool, Worsted, &c.—Little & Eastwood's Patent.
Machinery for Carding and Spinning Silk Waste.
Power Looms for all Descriptions of Plain and Fancy Cloths in Cotton and Wool.
Sizing, Dressing, Warping, Beaming, Winding, and Reeling Machinery.
Cloth-folding and Measuring Machines.
Hydraulic and Cam Bundling Presses for Yarn and Cloth.

**Also, Makers of PATENT MACARTHY COTTON GINS, Hand or Power, for long or short stapled Cottons.**

FOR FURTHER INFORMATION AND PRICES APPLY TO

**SAMUEL WOOD, Agent, 34 LETITIA ST., Philadelphia.**

Agent for Thompson & Co.'s English Card Clothing.

ESTABLISHED **POOLE & HUNT,** —1851.—

# Founders and Machinists.

## POOLE & HUNT'S

# LEFFEL TURBINE WATER WHEEL,

Prices as Low as any other First-Class Wheel.

## Machine Moulded

## MILL GEARING.

Our plant for the production of MACHINE-MOULDED MILL GEARING is unequaled in the country, and we are prepared to fill orders with dispatch and at GREAT SAVING IN COST OF PATTERNS.

## Shafting, Pulleys,

## HANGERS, PEDESTALS.

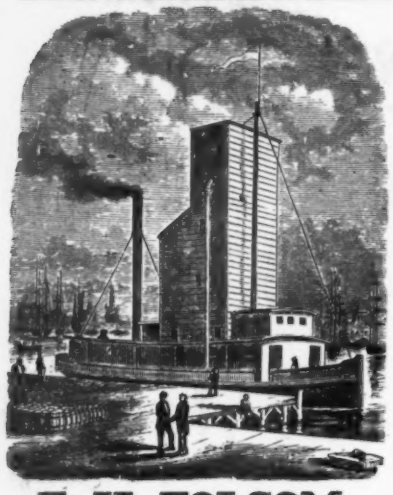
SHAFTING, PULLEYS, HANGERS and COUPLINGS, of latest and most approved designs.

N. B.—Shipping facilities the best in all directions.

*Send for Pamphlet. Send for Price-List.*

List of our Gearing Mailed on Application.

## POOLE & HUNT, BALTIMORE, MD.



F. H. FOLSOM,

**Millwright and Mechanical Engineer,**

48 S. Frederick St., BALTIMORE, MD.

All work executed and Drawings furnished at shortest notice for Floating and Stationary Elevators, Flour Mills, Malt Houses, Breweries, Saw Mills, Fertilizer Factories, Sumac Mills, Paper Mills, and all other kinds of Machinery — *Orders by mail promptly attended to at lowest prices.*

Agent for Seldner's Improved Belt Fastener.

—Send for Circular and Sample.—

# Hoisting Engines

Of any Power, Double and Single, with

**Improved Patent Friction Drums,**

Especially adapted for Bridge Building, Dock Building, Pile Driving, Coal Hoisting, Quarries, Mines, etc.

**STAMP MILLS**

OF ANY SIZE FOR MINES.

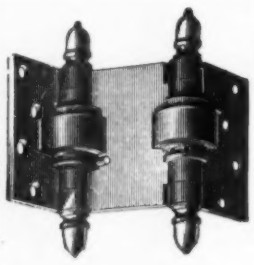
**J. S. MUNDY**

22 & 24 Prospect St.

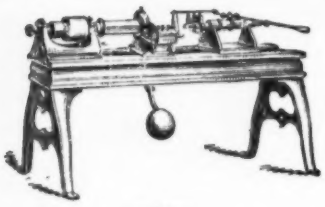
Newark, N. J.

**UNION SPRING HINGES** are **Simple, Easily Set.**

Cannot be put on wrong. They work either to right or left. All sizes. Single or double action. For Wire Screen and Light Doors they have no equal. Send for Price List. M. W. ROBINSON, Sole Agent, 79 Chambers St., New York.



# WOOD WORKING MACHINERY



—FOR—

**Planing Mills, Box Shops, Furniture, Chair and Cabinet Works, Mills, Car Shops and general Wood Workers.**

Send Stamp for new illustrated Catalogue just out. Address

ROLLSTONE MACHINE CO.

88 Water St., Fitchburg, Mass.

# E. J. CODD & CO.

**Foundry, Machine and Boiler Works,**

255 to 261 S. Caroline St., BALTIMORE.

—BUILDERS OF—

Stationary and Marine Boilers, Stills, Tanks, Agitators, Kettles, &c., Stationary and Marine Engines, Fertilizing Mills, Steam Dredges, &c.

Prompt attention given to Steamship, Mill and other Repairs. Iron and Brass Castings made to order.

**Established 1867.**

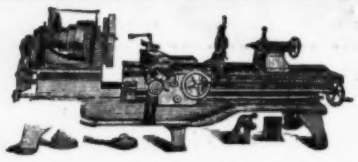
# E. HARRINGTON, SON & CO.

WORKS AND OFFICE,

Cor. N. 15th St. & Penna. Ave., Philadelphia.

Manufacturers of Patent Extension

# LATHES,



Iron Planers, Boring Mills, Drills,

and a variety of other MACHINISTS' TOOLS.

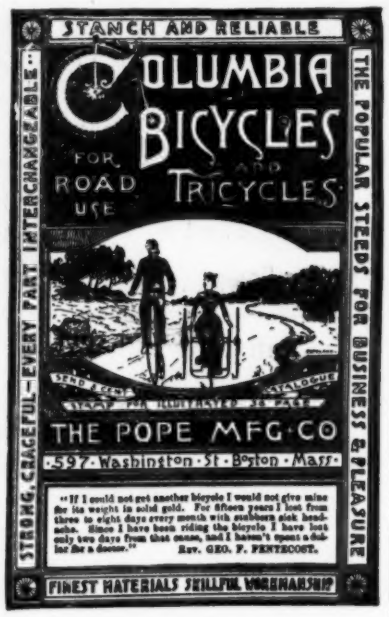
*Patent Double Chain Screw Pulley Blocks*, unrivalled for durability, safety and power.

*Patent Double Chain Quick-Lift Hoists*, with Brake for quick and easy lowering.

REPRESENTED BY

J. Q. MAYNARD, 12 Cortlandt St., New York.
C. E. KIMBALL, 191 High Street, Boston, Mass.
W. H. RICKEY, 116 Main St., Cincinnati, Ohio.

Circulars furnished.




THE

# Baltimore Trade Journal

A thoughtful, vigorous and aggressive champion of the FINANCIAL, COMMERCIAL AND INDUSTRIAL INTERESTS OF BALTIMORE.

The first issue will appear SATURDAY, October 4, and EVERY SATURDAY THEREAFTER.

Published by **W. R. WOODY,**

122 West Baltimore street.

# For Sale

Two story brick, 40 x60, machine shop, with brick foundry 40x50, and blacksmith shop. Lot 130x160; fronts on track and wharf. Apply to

**MERIWETHER & PATCH,**

CLARKSVILLE, TENN.

# WIRE RAILING

and Ornamental Wire Works.

**DUFUR & CO. 36 N. Howard St., Baltimore.**

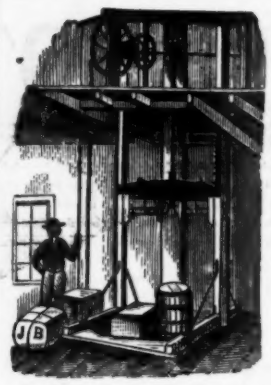
Wire Railing for Cemeteries, Lawns, Gardens, Offices and Balconies; Window Guards, Tree Guards, Wire Cloth, Sieves, Fenders, Cages, Sand and Coal Screens, Iron Bedsteads, Chairs, &c.

REUBEN HAINES,

# Analytical Chemist,

738 SANSOM ST., PHILADELPHIA.

Water Analysis and Assays of Ores and Minerals.



# Bates' Hand Elevators.

Patented April 18, 1871. Reissued 1 July 25, 1876.

OVER 6,000 IN USE.

Adapted for Warehouses, Stores, Factories, Hotels. Public Institutions, and every place where merchandise, &c., is transferred from one story to another.

*JAMES BATES, Patentee,*

Nos. 1, 3 & 5 President Street, BALTIMORE.

THE BRADSTREET

# Mercantile Agency

HAS NOW BEEN

*Under its present successful management for the past seven years,*

And during that time its business has more than treble d, while its facilities have proportionately increased.

No expense is considered too great in obtaining and applying to the conduct of the business all possible improvements. With its present system for obtaining and promulgating information, this Agency is justly regarded by its patrons as authority on all matters affecting commercial credit. Its ramifications are greater and its business larger than any similar organization in the world conducted in one interest and under one management.

You are respectfully invited to investigate, and if in need of an Agency, to test its ability to serve you.

**CHAS. F. CLARK, President.**

**Baltimore Office,—American Building,**

**H. KERSHAW, Supt.**

# IRON WORKING MACHINERY.

**NEW.**

1 Engine Lathe, each 10, 11, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 28, 30, 36, 42 and 48 in swing; length of bed to suit.
1 Fox Turret Lathe, each 13, 15 and 16 in swing; 5 ft. bed.
1 Sq. Arbor Fox Lathe, 15 in. x 6 ft.
1 each, Hand Lathes, 10, 12, 14, 15 and 18 in. swing.
1 Iron Planer, each to plane 18, 20, 22, 24, 26, 30 and 36 in. wide and high; length of table to suit.
1 each 16, 20, 22, 23, 25, 28, 30, 34, 38 and 42 in. swing. Upright Drills.
1 each, 2, 3, 4 and 6 Spindle Gang Drills.
1 each 8, 10, 12, 15, 20 and 28 in. Shapers.
1 No. 2 Milling Machine. Lincoln Pattern.
1 Grant & Bogert Milling Machine.
1 each, Nos. 2, 4 and 5 Screw Machines.
1 each, 3 and 7 Spindle Nut Tapper.
1 Boring and Turning Mill, each 50 and 72 in. swing
1 Cutter Grinder.
1 12 in. and 20 in. Cylinder Horizontal Engine.
1 each 4, 5 and 6 ft. Arm Universal Radial Drills.

**SECOND-HAND.**

1 Engine Lathe, 23 in. x 7 ft.
1 Iron Planer, 24 x 24 x 7 ft.
1 " " 50 x 50 x 17 ft.
1 " " 20 x 20 x 4 ft. A1 order.
1 " " 24 x 24 x 5 ft. " "
1 " " 30 x 30 x 7 ft. " "
1 " " 37 x 37 x 9 ft. " "
1 400 lb. Steam Hammer; nearly new.
1 Lincoln Pattern No. 2 Miller.
1 Bolt Cutter, to take sizes to 1 inch.
1 each, 9 and 10 in. Stroke Shaper.
1 30 in. Plain Upright Drill.
1 12 in. stroke Bement Slotter.
1 36 in. Gear Cutter.
1 Horizontal Boring Machine; takes 6 ft. between centres; 36 in. swing.

All kinds Machinists' Tools and Supplies.

**New York Agency of the Tanite Co,**

Grant & Bogert Machine Tool Works.

AND FOR THE

**"New Polished" Shafting.**

**H. PRENTISS & CO.**

42 Dey Street, New York.

— ESTABLISHED 1865.—

# Steam Boilers

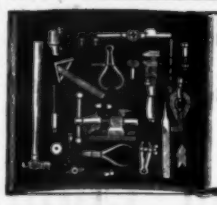
**JOHN T. COLEMAN & SONS,**

Steam Boiler Works,

Cor. Holliday and Pleasant Sts., Baltimore.

Manufacturers of all kinds of Steam and Bath Boilers, Smoke Stacks, Water Tanks, Lard Kettles, &c.

Particular attention given to repairs.



**Send for Catalogue.**

Chandler & Farquhar,
168 Devonshire St
BOSTON, - MASS.

Tools & Supplies for all classes OF MECHANICS AND MANUFACTURERS.

# AULT & WIBORG PRINTING INKS.

CINCINNATI.

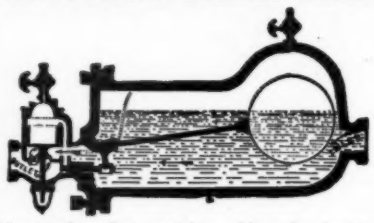
A&W INK USED ON THIS PUBLICATION.

**TOOLS for Machinists, Amateurs, Jewellers, Model Makers, Blacksmiths, Carpenters, Coachmakers, etc.**

*Send 20 cts. for* **new** *Metal Worker's Catalogue, 300 Pages. Wood Worker's Catalogue free.*

**FALLMAN & McFADDEN, Philadelphia, Pa.**

# The CURTIS STEAM TRAP.



Has *main* valve outside. *Air* valve inside.

MANUFACTURED BY

**Curtis Regulator Co., 158 Beverly St., Boston.**

—GENERAL AGENCIES:—

**109** Liberty St., New York; No. **19** N. 7th St., Philadelphia; **86** and **88** Market St., Chicago; No. **49** Holliday St., Baltimore; No. **707** Market St., St. Louis; No. **745** Craig, Montreal.

**NELSON CURTIS, Agent.**

**1837. NOVELTY WORKS. 1883.**

# JAMES MURRAY & SON,

# Machinists and Millwrights

Engines and Boilers, Mills of all kinds, Marine Railways, &c. Improved Clay Tempering Machinery, Steam or Horse Power. Phosphate Machinery, Crushers, Rollers, Mixers, &c., &c.

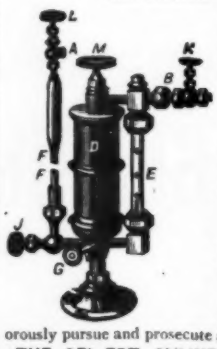
**40, 42 & 44 York Street,**

NEAR LIGHT BALTIMORE.

Repairing of all kinds promptly done.

# The Seibert Cylinder Oil-Cup Co.

SOLE MANUFACTURERS OF



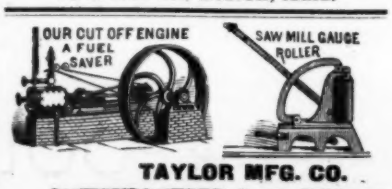

Oil Cups for Locomotives, Marine and Stationary Engine Cylinders, and the Seibert and Gates Patents, with Sight Feed.

**Take Notice.**

The "Sight Feed" is owned exclusively by this company. See Judge Lowell's decision in the United States Circuit Court, District of Massachusetts, Feb. 23d, 1882.—All parties are hereby notified to desist the use, manufacture or sale of INFRINGING CUPS, as we shall vigorously pursue and prosecute all infringers.

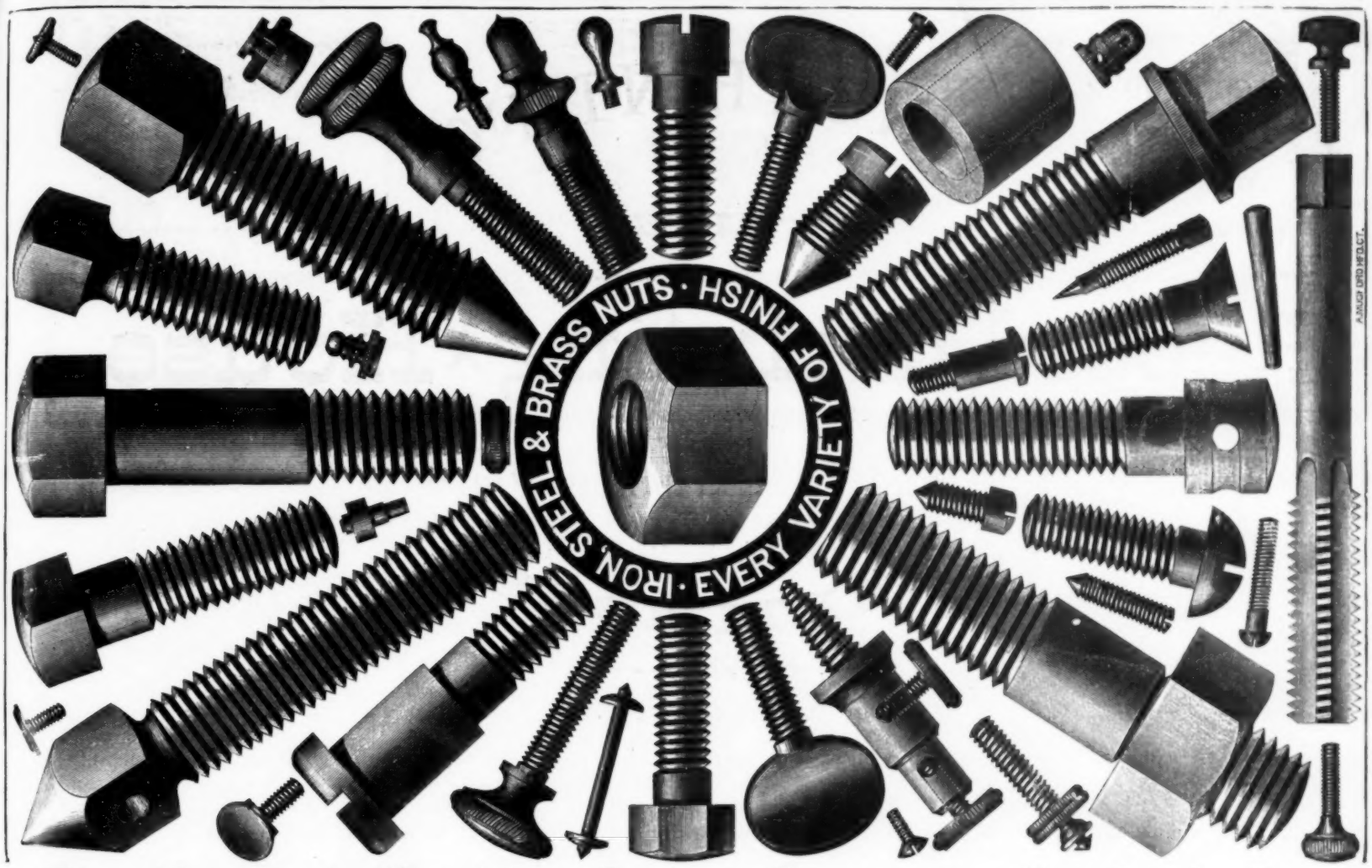
THE SEIBERT CYLINDER OIL-CUP CO.

**53 Oliver St., Boston, Mass.**




**TAYLOR MFG. CO.**

JACKSON & TYLER, Agents, Baltimore.




# The Hartford Machine Screw Company, Hartford, Conn.

—MANUFACTURERS OF—

Hexagon, Square, Round or Fillister Head Cap Screws, Oval Point and Cupped Point Set Screws, Collar Screws, Hanger Screws, Stud Bolts, Studs and Rolls.

Sewing Machine Screws, Gun Screws, Clock Screws and Trimmings, Piano Screws and Trimmings, Shear, Thumb and Watch Screws, Metal Dowel Pins for Pattern Work, Taper and Straight Pins of all Sizes. Taps and Reamers to match. Telegraph, Electrical and Optical Work. All kinds of Fancy Turned Metal Work. Many of the above varieties we carry in stock.

**Small Screw Tools a Specialty.** **Cheap Rotary Pumps for Supplying Machine Tools with Oil, Soda Water, &c.**

☞ The attention of Model Makers, Machine Builders and Buyers of Machine Screws is called to the fact that we carry in stock a great variety of Milled Machine Screws, including all Standard Sizes, with Taps to match. **By Referring to our Stock, much Time and Expense may be saved. PRICES Reasonable. Send for Lists.**

## ALWAYS USE THE BEST.

This Belt is stitched in seams one inch apart before putting on the outside Rubber Cover, which is made SEAMLESS and therefore cannot split. For endless Belt it is the ACME of PERFECTION, as the splice cannot separate. First cost somewhat more than the cheap Belts generally sold, but well worth the difference. Send for price-list and samples of Belts.

CHEAPEST in the END.

## GIANT GUM BELTING.

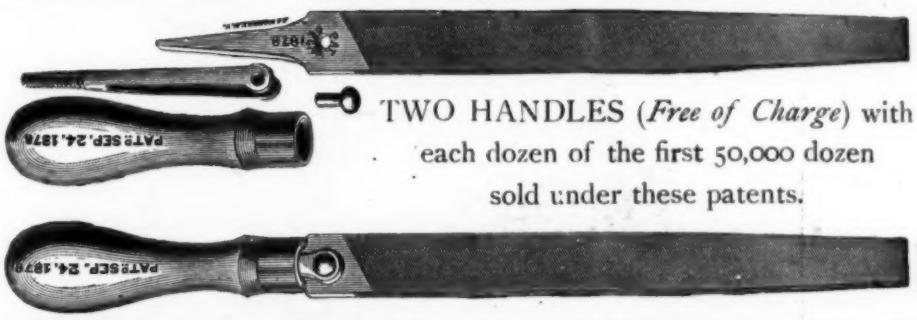
## REUTER & MALLORY,

—DEALERS IN—

MANUFACTURERS' SUPPLIES,

**22 Light St., BALTIMORE.**

# NEW AMERICAN FILE COMP'Y.




TWO HANDLES (*Free of Charge*) with each dozen of the first 50,000 dozen sold under these patents.

ESTABLISHED 1863.

DAILY CAPACITY, 1,000 DOZEN.

PAWTUCKET, R. I., U. S.

**PORTABLE FORGES** Empire Portable Forge Co. Cohoes, N. Y. ☞ Send for Catalogue.

**W. J. CHAPMAN,** Direct Shipper of COAL AND Connellsville Coke. Special attention given to orders from founders and machinists. Office, York and William Sts.

GOOD WORK.
Low Prices.
Prompt Delivery.

# FINE PRINTING.

THE

Catalogue Work
A
SPECIALTY.

# Record★Printing★House,

JOB WORK
OF
Every Description.

71 and 73 Exchange Place,
COR. COMMERCE STREET,
BALTIMORE.

Particular Attention
GIVEN TO
Orders by Mail.

IS ONE of the best equipped Printing and Publishing Establishments in the city. Being well stocked with the latest and best assortments of Type, and the finest Presses made, it is prepared to guarantee work equal to the finest turned out by Northern or Western printers.

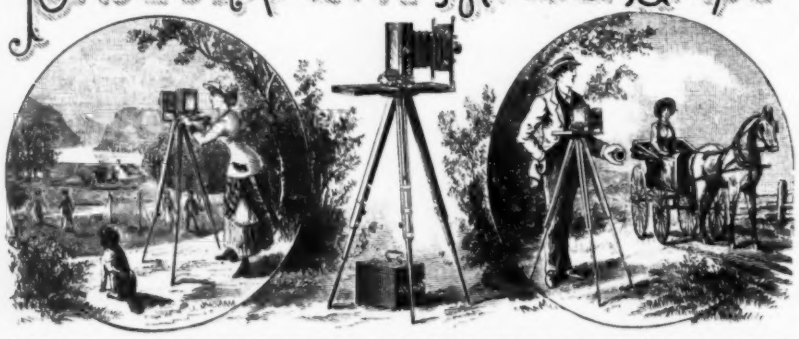
Correspondence invited from business men who desire printing of any kind. Estimates furnished upon application.

Address ❁RECORD PRINTING HOUSE,❁
71 & 73 EXCHANGE PLACE, COR. COMMERCE ST., BALTIMORE, MD.

# BRASS!

**Roll, Sheet and Platers' Brass,**
GERMAN SILVER,
**COPPER, BRASS AND GERMAN SILVER WIRE,**
**BRASS and COPPER TUBING,**
BATTERY and PLATERS' SILVER, &c.
PHILIP R. VOGEL, JR.
Manufacturers' Agent, No. 79 German Street, Baltimore, Md.

PHOTOGRAPHY MADE EASY



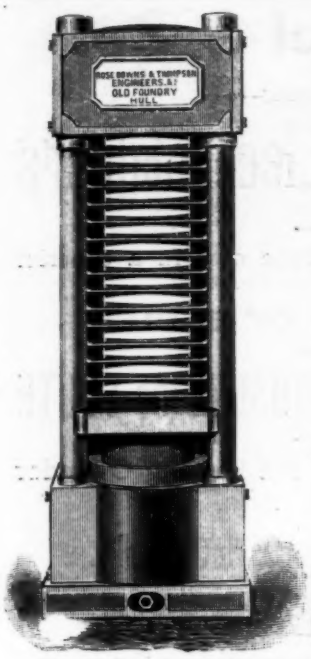
AMATEUR EQUIPMENTS IN GREAT VARIETY, FROM $10 UPWARD
*Sole Proprietors of the Celebrated Novel Cameras.*
E. & H. T. Anthony & Co.
Send for Illustrated Catalogue.
Forty years established in this line of business. 591 Broadway, New York.

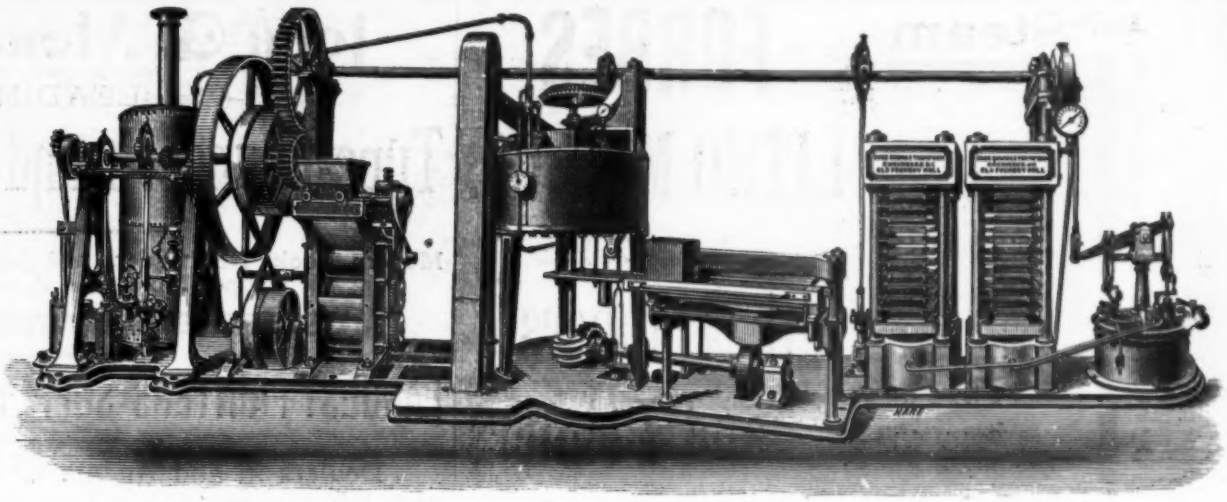
ALWAYS ASK FOR
ESTERBROOK'S
CELEBRATED
STEEL PENS.

PENS
LEADING NUMBERS:
048, 14, 130, 333, 135, 161
*For Sale by all Stationers.*
The Esterbrook Steel Pen Co.
*26 John Street, New York*

THIS IS OUR LATEST
Sheet Iron Parlor Stove.
Send for Circulars of all Styles.

MAGEE FURNACE CO.
32 to 38 UNION STREET, BOSTON.
92 BEEKMAN ST., NEW YORK.
86 LAKE STREET, CHICAGO.





REVOLUTION IN

# Cotton-Seed Crushing.

UNQUALIFIED SUCCESS OF

**ROSE, DOWNS & THOMPSON,**

**HULL, ENGLAND,**

## Anglo-American System of Extracting Oil from Cotton Seed,

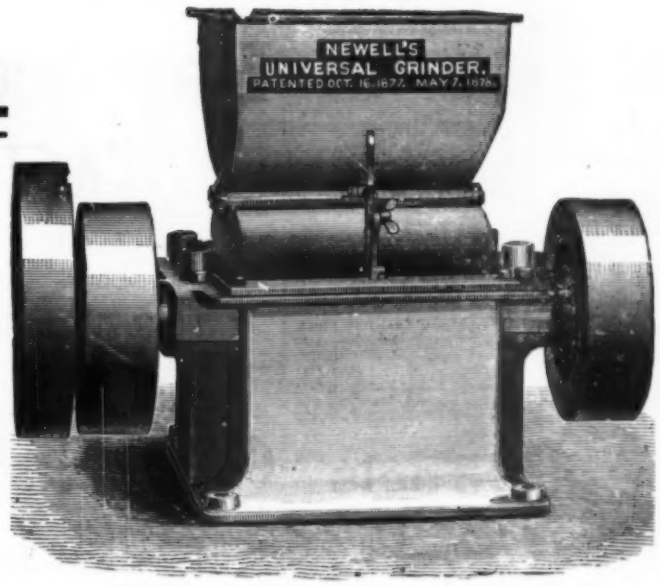
**SOLE AGENTS FOR THE UNITED STATES AND CANADA,**

# The Newell Universal Mill Co.

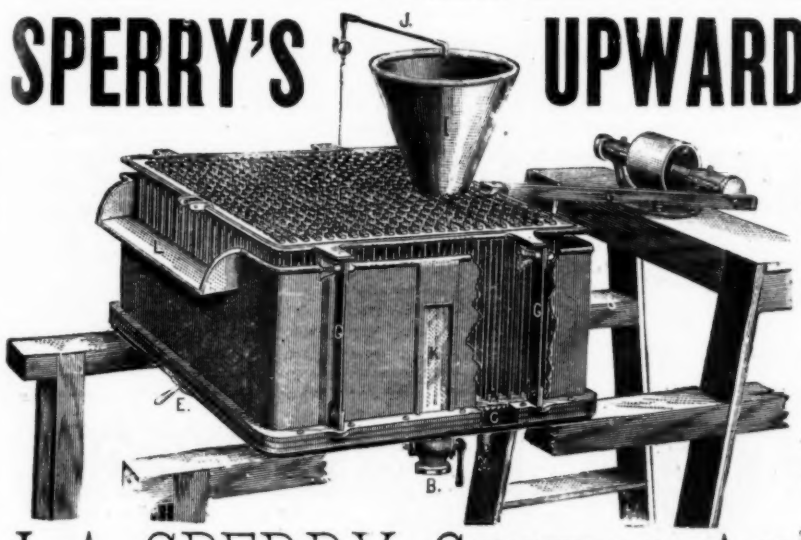
10 BARCLAY STREET, NEW YORK,

Who also manufacture the NEWELL MILL in all its forms and sizes.

☞A large stock assorted sizes of Engines and Boilers constantly on hand for immediate delivery.




# SPERRY'S UPWARD ✻ JET ✻ CONCENTRATOR,



The cheapest and best in the world. Adapted to all concentratable ores and slimes of GOLD, SILVER, COPPER, TIN, ZINC, &c., and MILL TAILINGS.

## Will Concentrate from 50 to 100 tons in 24 Hours

**PRICE $300. NO ROYALTY.**

Weight—14[illegible] Pounds. Power Required [illegible] of 1 Horse.

## *Sperry's ✻ Wet ✻ Sizing ✻ Machine*

Small and Compact. Entirely New Principle.

**Crushing Rolls, Rock Breakers, Stamp Mills and General Mining Machinery and Supplies.**

Full-size Concentrating Plant in operation at 12 Cortlandt St. Send for Circular.

## J. A. SPERRY, GENERAL AGENT, 12 CORTLANDT ST., N. Y.

NEW YORK. ✦ CINCINNATI. ✦ SAN FRANCISCO.

# AULT & WIBORG,

—MANUFACTURERS OF—

# BLACK ✻ AND ✻ COLORED ✻ PRINTING ✻ INKS,

✻Lithographic Inks and Varnishes,✻

CINCINNATI, OHIO.

**Eastern Branch, 21 and 23 Ann Street, - - - - NEW YORK.**

—R. H. C. VALENTINE, Manager.—

IF you contemplate the erection, extension, or alteration of any Mill, Factory, or Mechanical Works of any sort, requiring *Steam, Water*, or *Gas* to be introduced, it will well repay you to send for our Catalogue and Price-List. It contains upwards of 600 Cuts, and will be found of service to **Pipe-Fitters, Engineers, Superintendents of Railroads, Mills, Factories, Water, Ice, Oil** and **Gas Companies**, and all who are interested in the use of Steam, Water, and Gas, and is an exhaustive book of reference for the selection of such goods.

***PANCOAST & MAULE, 243 and 245 South Third Street, Philadelphia.***

## Steam

Wrought-Iron Pipes, Cast-Iron Pipes, Boiler Tubes, Spiral Riveted Wrought-Iron Pipes, Cast-Iron Fittings, Wrought-Iron Fittings, Malleable Iron Fittings, Bent Coils of Wrought Iron Pipe for Heating, Boiling, &c., Steam Radiators, Brass and Iron Cocks and Valves, Radiator Valves, Openway Valves, Boiler Trimmings, Gauge-Cocks, Steam Gauges, Water Gauges, Steam Whistles, Lubricators, Oil and Tallow Cups, Revolution Counters, Gongs, Steam Boiler Tube Cleaners, Steam Boiling Kettles, Feed-Water Heaters, Pressure Regulators, Damper Regulators, Steam Traps, Glue Heaters, Injectors, Inspirators, Steam Pumps, Syphon Pumps, Engine Governors, &c.

**Contractors for Steam-Heating Apparatus of all kinds.**

## Water

Wrought-Iron Pipes—Plain and Galvanized, Heavy Cast-Iron Pipes, Fittings of all kinds, Cast-Iron Soil Pipe, Green-House Boilers, Pipe and Fittings, Pumps of every description—Steam- or Hand-Power, Fire Hydrants and Valves, Street Main Valves, Foot Valves, Hose Valves, Pipes, Couplings, &c. Bath Boilers, Brass Water-Cocks and Valves in Detail.

## Gas

Wrought- and Cast-Iron Pipes, Cast, Wrought, and Malleable Iron Fittings, Brass Fittings, Service and Meter Cocks, Gas Burners, Solder Furnaces, Gas Valves, Street Lamp-Posts and Lanterns, Gas-Fitters' Tools and Sundries.

## Tools

Hand and Power Pipe-Cutting and Threading Machines, Pipe Stocks and Dies, Pipe Taps, Drills and Reamers, Machinists' Die-Plates, Machinists' Taps, Solid Bolt Dies, Pipe-Tongs, Adjustable Tongs, Pipe-Wrenches, Monkey-Wrenches, Gas-Fitters' Pliers, Augers, Pipe-Cutters, Pipe Vises, Chisels, Ratchets, Gas-Fitters' Pumps, Boiler Tube Brushes and Cleaners, Boiler Tube Expanders, Hydraulic Punches and Jacks, Patent Hand Hoisting-Machines, Oilers, Hammers, &c.

**Correspondence solicited from parties requiring any Goods in the above lines.**

MENTION THIS PAPER WHEN YOU ADDRESS US.

# McShane Bell Foundry

Manufacture those celebrated **Bells** and **Chimes for Churches, Tower Clocks, &c., &c.** Prices and catalogues sent free.
—Address—
**H. McSHANE & CO.**
**Baltimore, Md.**

# Vulcan Works

**BALTIMORE, MD.**

The undersigned is prepared to contract for the manufacture and erection of BOILERS AND ENGINES for Steamers, Manufactories, Mines, Water Works, Blowing Engines for furnaces, &c., &c. He will also furnish designs and contract for the building and erection of Iron Bridges, Build Girders, Beams, &c., for Railways or Buildings. Castings of all descriptions. Information and estimates furnished upon application as above.

**H. R. HAZLEHURST.**

**Benaiah Thornton.** **John Cahill.**

People's Machine & Boiler Works.

**JAS. CLARK & CO.**

BUILDERS OF

STEAM ENGINES, BOILERS,

MACHINERY AND IRON HULLS.

**Heavy and Light Forging a Specialty.**

SOUTH SIDE OF THE BASIN, NEAR CITY YARD.

Convenient to Marine Railways. BALTIMORE.

# FORBES LITHO MFG. CO.

**181 Devonshire St., Boston.**

Lithographers and Printers

BY EVERY KNOWN PROCESS.

DRY GOODS

*TICKETS*

**Bands, Labels, &c.**

**FINE COLOR WORK A SPECIALTY.**

**Galvanized Iron**

# CORNICE.

Architectural Sheet Metal Work.

Galvanized Iron Gutters made in lengths of 8 feet without a joint. Corrugated Iron Sheds and Buildings.

**GEDDES'S PATENT METALLIC SKYLIGHT,**

OR A SYSTEM OF GLAZING WITHOUT PUTTY.

VENTILATION.—Ventilating Apparatus a Specialty. Correspondence Solicited.

**JAS. W. GEDDES & CO.**

67 and 69 North St., Baltimore.

**OILS**

Established 1858.

**JAS. B. MACNEAL & CO.**

Manufacturers, Jobbers and Dealers in

Burning, Machinery, Tanners and R. R. Oils,

**34 S. Calvert St., Baltimore.**

Special quotations on application.

**Established 1793.**

**H. BALDERSTON & SON,**

MANUFACTURERS OF

**WIRE GRATING FOR WINDOWS**

Doors and Office Railing, Wire Screens for Banks, Churches and Store-Fronts. Woven Wire, Wire Tree-Guards, Sieves, Screens for Coal, Sand, &c.

66 S. Calvert Street, Baltimore.

**THE FAVORITE**

**Transfer Steamer "Maryland" Route.**

THROUGH PULLMAN CARS FOR

**BOSTON**

**Without Change.**

LEAVE CHARLES-ST. DEPOT at 3 P. M. week days; Sundays at 5 40 P. M., arriving in Boston at 7 55 A. M. next day.
Ask for Tickets via *New York & New England Railroad* at Penna. Railroad Ticket Offices.

# John G. Mengel & Co.

LEADING

# Type-Founders and Electrotypers

**Modern Book, Newspaper, and Job Type cast in a superior Copper-Mixed Metal, and on the new**

**JUSTIFIABLE SYSTEM OF BODIES.**

**LARGEST PRINTERS' SUPPLY HOUSE in the SOUTH**

**Dealers in and Agents for all the leading Cylinder and Job Presses, Paper-Cutters, &c., &c.**

**Agents for the Celebrated German Printing Inks.**

**SECOND-HAND MACHINERY Bought, Sold, and Exchanged.**

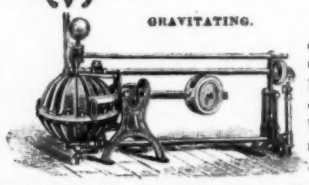
**Complete Newspaper and Job Offices Furnished at the Lowest Prices and on good terms.**
**Send for Specimen Sheets, Estimates, &c., to**

**31 German Street, Baltimore.**

THE ALBANY STEAM TRAP COMPANY'S

**SPECIAL BUCKET**

And GRAVITATING Traps.




Automatically drain the water of condensation from HEATING COILS, and returns it to the boiler, whether coils are **above or below** the water level in boiler, doing away with pumps and other mechanical devices for such purposes.

ALBANY STEAM TRAP COMPANY, Albany, N. Y.

**Office and Works, 78 and 80 Church Street.**

# PHOSPHOR-BRONZE

*"Phosphor Bronze."*

**The celebrated alloys in Wire, Rods, Sheets, Bolts, Wire Ropes, Wire Cloth, Castings, Ingots, etc.**
Pamphlets and particulars on application to

**THE PHOSPHOR-BRONZE SMELTING CO., Limited.**

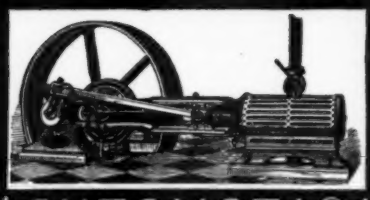
**No. 512 ARCH STREET, PHILADELPHIA, PA.**

Owners of the U. S. Phosphor-Bronze Patents.
Sole Manufacturers of Phosphor-Bronze in the United States.

# THE CUMMER ENGINE CO.

CLEVELAND OHIO

SEND FOR 150 PAGE ILLUS. CATALOGUE.



AUTOMATIC

***Awarded highest premiums at Cincinnati and Louisville Expositions of 1883, for "Best Automatic Engine." We will furnish anyone copies of the ORIGINAL ENTRIES of several engine builders who claim they were not competing with us. They all entered in the same class with us, and now by deceptive Circulars (one headed "Fact versus Falsehood,") attempt to mislead.***

***☞No premiums were offered for Condensing Engines.***

# PATENT CLASP PULLEY

Made in Halves. ☞Same Price as Whole Pulleys.

SHAFTING, HANGERS,

Castings of Every Description Made. Stationary, Distillery, Mill and Boiler Work.

JNO. N. MARQUETTE, 6 W. Falls Ave., Baltimore.

# STEPHENS' VISES.

FLAT and SWIVEL BASES; SOLID JAWS STEEL FACED and SOLID STEEL BARS; ADJUSTABLE ATTACHMENTS.

For Jewelers, Machinists, Car and Locomot've Works and all other Vise Work they *maintain their superiority in strength, firmness of grip durability and make*; while affording the *greatest economy time and labor*. Special Vises for Amateurs an Wood-Workers. Sold by the Trade. Send for Circular.

MELVIN STEPHENS, Proprietor,
41 Dey St., NEW YORK.

**TOOLS.** IMPROVED POWER OR HAND PLANER.

Planes 27 in. long, 12 in. wide, 8 in. high.

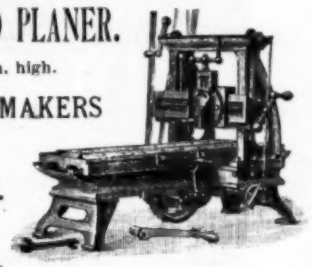
MACHINISTS, ENGINEERS, MODEL MAKERS

and all classes of Mechanics can find **TOOLS** to suit them at

184 to 188 Washington St.

BOSTON, MASS.

**A. J. WILKINSON & CO.** Catalogues free.



# STUEBNER & WOODS

**168 & 170 E. Third St., Hunter's Point**

LONG ISLAND CITY, N. Y.

MANUFACTURERS OF

**COAL DEALERS AND STEVEDORES' SUPPLIES.**

**STEEL and IRON COAL TUBS,**

**Side and Bottom Dumping Cars, Coal and Coke Barrows,**

**HOISTING BLOCKS, ETC.**

Send for Circulars, &c.

# The True Idea of Assurance.

Women's Mutual Insurance and ACCIDENT COMPANY.

PRESIDENT, ELIZABETH B. PHELPS.

VICE-PRESIDENT, MARGARET HOLCOMBE.

FANNY M. GERARD, Treas. ELIZABETH S. ROBERTS, Secy. CORNELIA KAMPING, Actuary.

MEDICAL EXAMINERS.

ALFRED K. HILLS, M. D., 465 Fifth Avenue. MARY PUTNAM JACOBI, M. D., 110 W. 34th Street.

JOHN A. KAMPING, Attorney and Counsel, 128 Broadway, New York.

The Company is incorporated under the Laws of New York, approved by the Supreme Court and Superintendent of the Insurance Department, and subject to the latter's supervision.

ITS OBJECT is surely and cheaply to provide an indemnity for loss by death and accidental disablement.

ITS PLAN consists in assessing the members ratably according to age in the Life Class, and according to occupation or degree of risk in the Accident Class whenever a loss in either class occurs. In other words, the actual losses only are paid by the policy holders, which thus secures insurance at cost.

ITS MEMBERSHIP comprises persons between the ages of 16 and 67, of approved physical condition. The Life Class is separate and distinct from the Accident Class, members being liable for losses only occurring in the class to which they belong. This company, having been organized for the purpose of removing the prejudices which created discrimination in Life insurance against women, has adopted the broad principle of no discrimination in membership on account of sex. This Company requires Agents in every city, town and village, to whom liberal terms will be given. Address as above.

ITS SAFETY AND SECURITY consists in its economical system, its certainty of solvency, (for it incurs no risk but what the members may discharge by one assessment,) and its SECURITY RESERVE FUND, which in time, it is calculated, will make a member's membership self-sustaining.

ITS RATES OF ASSESSMENT are safer than those adopted by others, and are no more expensive.

FINALLY, This company confines itself to the legitimate business for which insurance has been accorded protective and encouraging legislation; it proposes to adhere strictly to business principles in its management, and to establish the fullest protection to its members in a manner the simplest, cheapest and most complete of any organization of equal safety. Membership may be acquired by letter. Apply to

**ELIZABETH S. ROBERTS, Secretary,**
283 Fourth Avenue, New York.

# S. W. RITTER, Millwright,

—BUILDER OF—

Flour and Saw Mills, Drug and Chemical Works, Portable Mills, Smut Machines, Mill Stones, Bolting Cloths, Brushes, Guano Fertilizer Mills, and General Mill Supplies.

**261 S. Caroline Street, BALTIMORE, MD.**

**JOSEPH B. MATTHEWS,** 41 Centre Market Space, BALTIMORE, MD.

—MANUFACTURER OF THE—

***MATTHEWS AUTOMATIC HIGH-SPEED ENGINE,***

For Electric Lights and other purposes requiring steady, reliable power. The best and cheapest in the market. 25 H. P. for $500. SEND FOR CIRCULAR.

ESTABLISHED 1845.

**The Oldest Saw Manufactory in the South.**

# TOLAND & SON, 85 N. Front St., Baltimore.

Particular attention paid to Large Circular Work. We warrant our Small Circular Saws to stand more strain, without buckling or cracking, than any other make. We make all kinds of Saws,—Ensilage, Feed, Meat Choppers, and other knives made to pattern, warranted equal to the **Best Forged Knives**, and CHEAPER.

N. B. We make no charge for hammering any Large Circular Saw that we can't make "go."

—GIVE US A TRIAL.—

# GRAND HOTEL,

BROADWAY and 31st St., NEW YORK.

**EUROPEAN PLAN.** **HENRY MILFORD SMITH & SON, Proprietors.**

Devon Inn, Devon, Penna., H. J. & G. R. CRUMP.

The Grand Hotel, Catskill Mountains, EDW'D A. GILLETT.

# COLONNADE HOTEL,

Chestnut St. Cor. 15th, one block from New Penna. R. R. Depot,

H. J. & G. R. CRUMP.
E. A. GILLETT.

PHILADELPHIA.

Favorite Resorts for all Southern Travel.

*ESTABLISHED IN 1847.* **Always a Favorite Hotel For Southern Travel.**

# REVERE HOUSE,

BOWDOIN SQUARE, BOSTON, MASS.

Central Location,—near all the principal Business Houses, Theatres, &c. Horse Cars to all parts of the city, and to and from all Railroad Stations pass the door. The house still retains its old-time reputation for excellence of table and service.

BOOTHBY & BROWN, Proprietors.

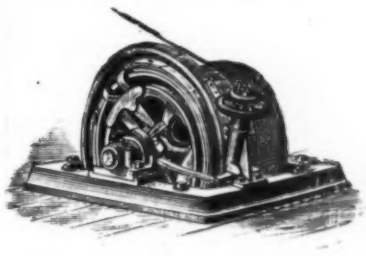
# BAY STATE HOUSE,

WORCESTER, MASS.

W. L. SHEPARD, Proprietor.

The House has been thoroughly repaired and renovated, and will be KEPT STRICTLY FIRST-CLASS IN EVERY RESPECT.

**The Only First-Class Hotel in the City.** **Rates, $3.00 and $3.50 per day.**



Charles Webster, *Pres.* S. M. Burnham, *Sec'y.* J. C. Lane, *Supt.* W. T. Allen, *Treas.*

**WEBSTER, CAMP & LANE MACHINE CO.**

**140 Main St., Akron, O.**

BAND FRICTION HOIST

**For Mines and Blast Furnaces.**

The SAFEST, SIMPLEST, STRONGEST and BEST in the Market. Engines, Boilers, Pumps, Skips, and everything pertaining to a first-class plant of Hoisting Machinery. Correspondence solicited.

RAILWAY, MACHINISTS AND MINING SUPPLIES.

**H. A. ROGERS.**

19 JOHN ST. NEW YORK.

**GOVERNORS** For Water Wheels — Cohoes Iron Foundry & Mch. Co.

Send for Catalogue. Cohoes, N. Y.

# E. W. BLISS

## PRESSES & DIES.

FINE ENGINE LATHES AND SHAPERS.

SPECIAL MACHINERY FOR TIN & SHEET METAL WORKERS

PLYMOUTH, PEARL & JOHN ST'S. } BROOKLYN, N.Y.

## Barnes' Patent Foot and Steam Power Machinery.

Complete outfit for Actual Workshop Business. Lathes for Wood or Metal, Circular Saws, Scroll Saws, Jointers, Mortises, Tenoners, &c. Machines sent on trial if desired. DESCRIPTIVE CATALOGUE AND PRICE-LIST FREE.

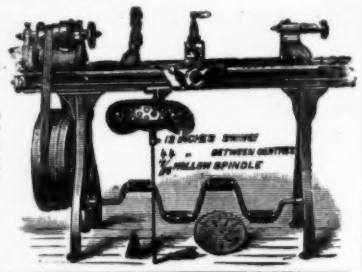
## FOR BUSINESS IN THE WORK SHOP.

**Read what our Customers say:**

C. C. Hill, M. E., BLACKFOOT, IDAHO:—"I set at the Lathe steadily for 11 hours, cutting off and threading 1½ steam pipes. Those who saw the work declared it equal to a 15-hour job in a machine shop. Taken with special regard to the velocipede foot motion, I consider the lathe without an equal. Address,

W. F. & JOHN BARNES,

**No. 221 Ruby Street, ROCKFORD, ILL.**



# STEEL CASTINGS

## FROM 1-4 to 15,000 lbs. WEIGHT.

True to pattern, sound, solid, free from blow-holes, and of unequaled strength.

Stronger and more durable than iron forgings in any position or for any service whatever.

20 000 CRANK SHAFTS and 15,000 GEAR WHEELS of this steel now running prove this.

CRANK SHAFTS and GEARING specialties.

STEEL CASTINGS of every description.

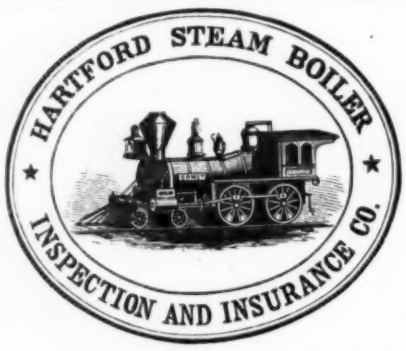
☞ Send for Circulars and Prices to

CHESTER STEEL CASTINGS CO.

**Office, 407 Library Street, Philadelphia. Works, Chester, Pa.**

—ISSUES— POLICIES OF INSURANCE

AFTER




A CAREFUL INSPECTION OF THE BOILERS.

Covering all Loss or Damage to

# Boilers, Buildings and Machinery

***ARISING FROM STEAM BOILER EXPLOSIONS.***

☞ The Business of the Company Includes All Kinds of Steam Boilers.

Full information concerning the plan of the Company's operations can be obtained at the **COMPANY'S OFFICE, Hartford, Conn.**, or at any agency.

**M. ALLEN, Prest. W. B. FRANKLIN, Vice-Prest. J. B. PIERCE, Secty.**

BOARD OF DIRECTORS:

J. M. ALLEN, President.
LUCIUS J. HENDEE, President Ætna Fire Insurance Co.
F. W. CHENEY, Asst. Treas. Cheney Bros. Silk Mfg. Co.
CHARLES M. BEACH, of Beach & Co.
DANIEL PHILLIPS, of Adams Express Co.
G. M. BARTHOLOMEW, Prest American National Bank.
R. W. H. JARVIS, Pres't Colt's Fire Arms Mfg. Co.
THOMAS O. ENDERS, Secretary Ætna Life Insurance Co.
LEVERETT BRAINARD, of Case, Lockwood & Brainard.
GEN. WM. B. FRANKLIN, Vice-President Colt's Patent Fire Arms Manufacturing Co.
GEO. CROMPTON, Crompton Loom Works, Worcester.
WILLIAM ADAMSON, of Baeder, Adamson & Co., Phila.
HON. THOMAS TALBOT, Ex-Governor of Massachusetts.
NEWTON CASE, of Case, Lockwood & Brainard, Hartford.
NELSON HOLLISTER, of State Bank, Hartford.
CHAS. T. PARRY, of Baldwin Locomotive Works, Phila.
HON. H. C. ROBINSON, Attorney-at-Law, Hartford.

**LAWFORD & McKIM, Agents for Maryland, 10 S. Holliday St., Baltimore, Md.**

# CAREW'S PATENT WIRE CUTTER.

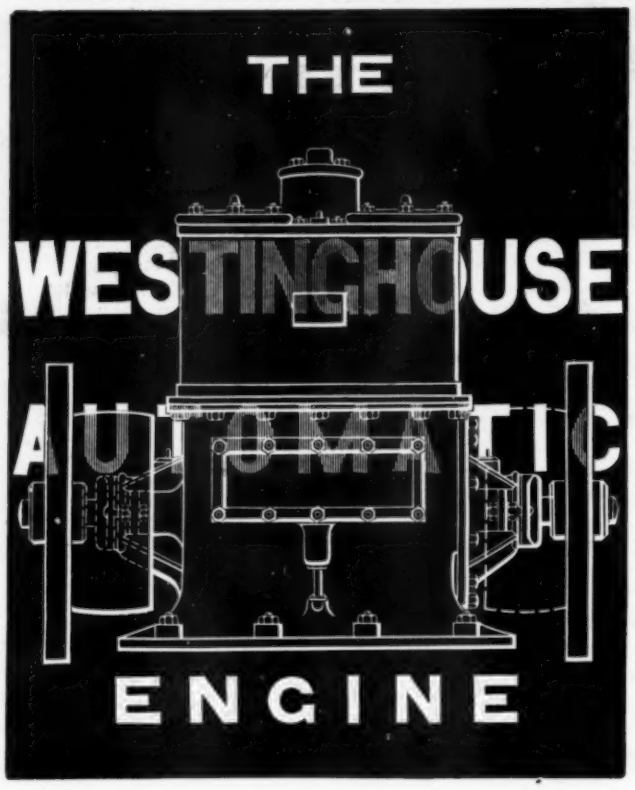
These goods have recently been greatly improved. They are now made throughout of

**FORGED STEEL.**

The advantage of this cutter is seen at a glance. The adjustable jaws are its main feature. These are made of the best tool steel, and are brought to a keen cutting edge before being tempered. The cutting quality is unsurpassed. Whenever they become dulled by use, they can easily be removed, by driving from the end showing price-mark, ground, and as easily replaced. This may be repeated as often as expedient; or they can be replaced by duplicate jaws, thus obviating the necessity of purchasing new cutters. **Five sizes 6, 8, 10, 12 and 14 inch.**

**M. W. ROBINSON, Sole Agent, 79 Chambers St., N. Y.**

4 TO 400 HORSE-POWER.




UNEQUALED for REGULATION and Low Cost of Operation.

**SALES, 2,000 H. P. per Month.**

SEND FOR ILLUSTRATED CIRCULAR and REFERENCE LIST.

THE

# Westinghouse Machine Co., Pittsburgh, Pa.

**SALES ROOMS:**

94 Liberty St., NEW YORK. 401 College St., CHARLOTTE, N. C. 401 Elm St., DALLAS, TEXAS. 53 S. Market St., NASHVILLE, TENN. Also, Fairbanks, Morse & Co., Chicago, Cleveland, Cincinnati, Louisville and St. Paul. Fairbanks & Co., St. Louis, Indianapolis and Denver.

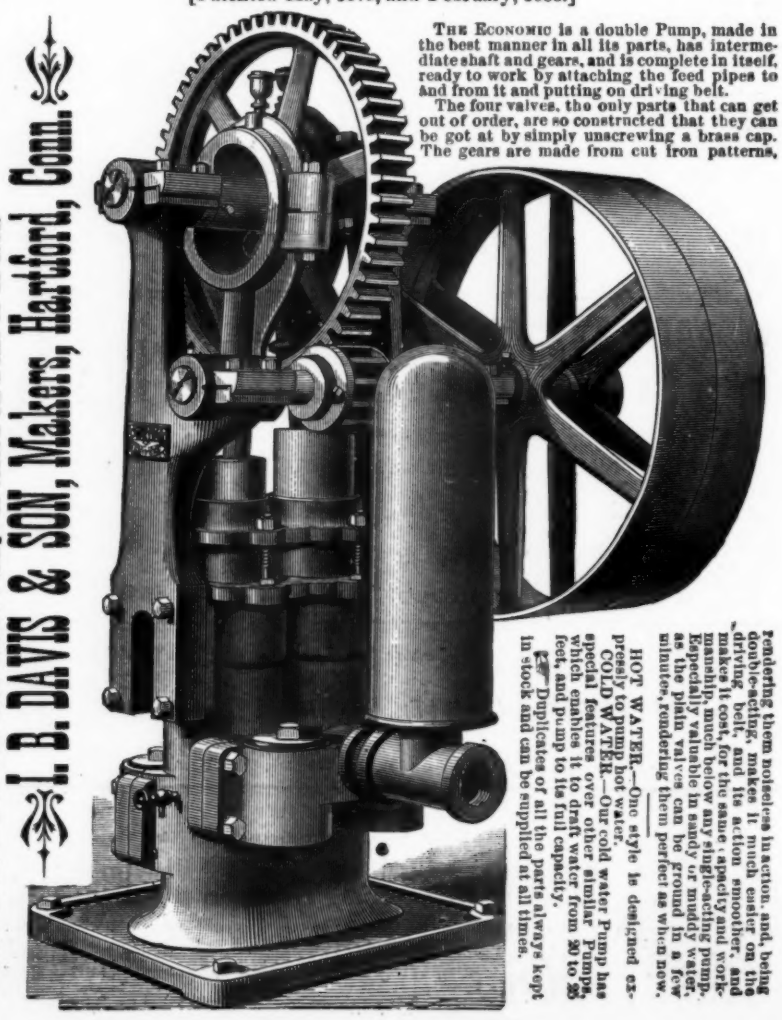
## THE ECONOMIC PATENT

# Boiler Feed Pump

[Patented May, 1879, and February, 1883.]

**NOTE.—Every one of our Cold Water Pumps is tested on a lift of 25 feet.**

**J. B. DAVIS & SON, Makers, Hartford, Conn.**



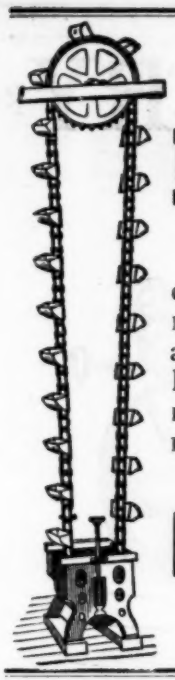
THE ECONOMIC is a double Pump, made in the best manner in all its parts, has intermediate shaft and gears, and is complete in itself, ready to work by attaching the feed pipes to and from it and putting on driving belt.

The four valves, the only parts that can get out of order, are so constructed that they can be got at by simply unscrewing a brass cap. The gears are made from cut iron patterns, rendering them noiseless in action, and, being double-acting, makes it much easier on the driving belt, and its action smoother, and makes it cost, for the same capacity and workmanship, much below any single-acting pump. Especially valuable in sandy or muddy water, as the plain valves can be ground in a few minutes, rendering them perfect as when new.

HOT WATER.—One style is designed expressly to pump hot water.

COLD WATER.—Our cold water Pump has special features over other similar Pumps, which enables it to draft water from 20 to 25 feet, and pump to its full capacity.

☞ Duplicates of all the parts always kept in stock and can be supplied at all times.



# ANTI-FRICTION
## Roller Detachable Chain Belting.

Especially adapted for the rapid and economical handling of CLAY, TILE, LIME, PLASTER, CEMENTS, BROKEN STONE, COAL, ORES, SAND, DRY and WET TAN, SAW DUST, SLABS, PULP, GRAIN, FLOUR, ICE, &c., &c., &c. For ELEVATORS, CARRIERS, CONVEYERS, &c., &c. Propelling STEAMBOATS and for other DRIVING PURPOSES.

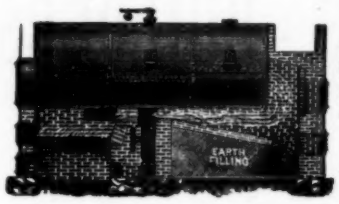
MANUFACTURED AND SOLD BY THE

## Lechner Manf'g Co.

COLUMBUS, OHIO.

Send for Illustrated Catalogue.

# JARVIS PATENT FURNACE
## FOR SETTING STEAM BOILERS.




Economy of Fuel, with increased capacity of Steam Power. Like the **Siemens Process of Making Steel,** it utilizes the waste gases with hot air on top of the fire. Will burn all kinds of waste fuel without a blast, including Slack Coal, Saw dust, Logwood Chips, &c. Send for Circulars.

**Jarvis Engineering Co.,**
A. F. UPTON, Treas. and Gen'l Manager,
**7 Oliver St., Boston, Mass.**
**JOSHUA C. COE,** Agent for Maryland and Virginia, 18 Second Street, Baltimore, Md.

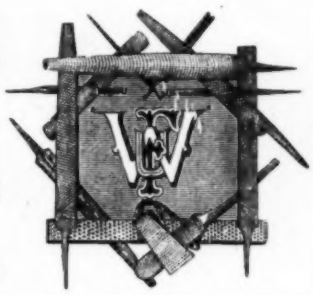
**SOUTHERN REFERENCES:**

Eagle & Phenix Mfg. Company, Columbus, Ga.
Lane Cotton Mills, New Orleans, La.
Central Rolling Mills, Louisville, Ky.
Anniston Mfg. Co., Anniston Ala.
J. P. King Mfg. Co., Augusta, Ga.
Coosaw Mining Co., Charleston, S. C.
Rose Mining Co., Charleston, S. C.
Maryland Pavement Co., Baltimore, Md.
Brush Electric Light Co., Baltimore, Md.
Ettrick, Matoaca and Battersea Mfg. Co's., Petersburg, Va.
Symington Bros. & Co., Baltimore, Md.
Basin Fertilizing Co., Baltimore, Md.
Henry McShane & Co., Baltimore, Md.
Tanner & Delaney Engine Co., Richmond, Va.
Sibley Mills, Augusta, Ga.
Graniteville Mfg. Co., Graniteville, S. C.
Charleston Bagging Co., Charleston, S. C.
P. H. Mayo & Bros., Richmond, Va.
Nashville Mfg. Co., Nashville, Tenn.
National Mfg. Co., Nashville, Tenn.

# Union File Co.

311 to 315 North St., Baltimore, Md.

MANUFACTURERS OF



## FILES & RASPS

Made from the Best Refined Cast Steel.

With the requisite facilities to produce a first-class article, we are enabled to offer Files that will give entire satisfaction.

**MORITZ & KEIDEL, Agents, 48 & 50 German Street, Baltimore, Md.**

Business Established 1832 (on Present Premises.) The Oldest House in the Trade.

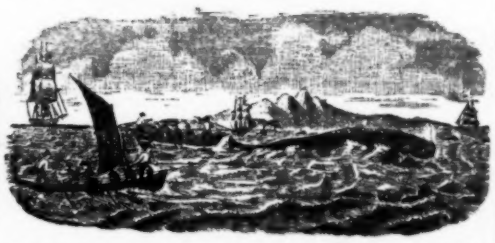
# WM. C. ROBINSON & SON,
**81 SOUTH ST., BALTIMORE, MD.**

MANUFACTURERS OF

AND

Wholesale Dealers in

# OILS!



**Specialties—Oils for Cotton and Woolen Mills, Railways, Tanners' and Machinery Use.**

We always have in stock **OILS** for every known purpose. Agents for Downer's Spindle, Champion and Mineral Sperm, Meriam & Morgan Paraffine Co's Paraffine, and Williams' Odorless Lubriphene **OILS.**

# THE NEW PULSOMETER

**The cheapest, strongest, most simple, compact, durable, effective and economical STEAM PUMP IN THE MARKET,**

**for raising liquids under and up to 100 feet. No Machinery, No Oil, No Special Care. Can be worked suspended by a chain. Will pass grit, mud, sand, pulp, etc., without injury to its parts. Needs only a steam pipe from boiler to run it. Price, 600 gallons per hour, $50; 1,200 do. $75; 3,600 do. $100; 6,000 do. $150; 10,000 do. $175; 18,000 do. $225; 25,000 do. $275; 45,000 do. $400; 60,000 do. $500; 120,000 do. $1,000. Compare this with any other Pump List.**

Write for illustrated descriptive book with testimonials, &c. *Mailed free.*

**PULSOMETER STEAM PUMP CO., 83 John St., New York City, U. S. A.**

# CINCINNATI CORRUGATING CO.

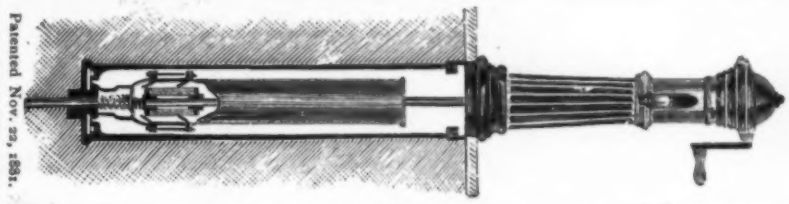
—SUPERIOR—

## Corrugated Iron Roofing, Siding, Ceiling, Arches, Laths.

GREATEST ECONOMY, DURABILITY, EFFECTIVENESS.

Send for our New Illustrated Catalogue.

CINCINNATI, OHIO.




## W. J. CLARK & BRO., MANUFACTURERS OF HYDRANTS

These Hydrants are made of the best material, and are guaranteed to be entirely non-wasting and non-freezing. The works of these Hydrants can be taken out and repaired without breaking the ground. ☞ Send for circular. **No. 38 N. Holliday Street, BALTIMORE, MD.**

**METALLIC SHINGLES.**

$5.50 per square | ANGLO-AMERICAN ROOFING CO. 22 Cliff Street, New York

Established a Quarter of a Century in the Manufacture of the Celebrated MILLER SAFES.

**L. H. MILLER,**

## SAFE AND IRON WORKS,

**BALTIMORE, MD**

Sole Manufacturer of

Miller's Patent Fire & Burglar Proof Safes,

BANK VAULTS, DOORS AND LOCKS.

PRINCIPAL OFFICE, 252 W. BALTIMORE ST.

[NEAR HANOVER.]

**Factory—Square bounded by Warner, Claret, Henrietta and Fremont Sts., South Baltimore.**

# JOHN R. EDWARDS,
# Blank Book Manufacturer,

LITHOGRAPHER, PRINTER AND STATIONER,

167, 169 AND 171 W. LOMBARD ST. COR. SHARP ST.

BALTIMORE, MD.

Specialty: Account Books to order for Manufacturing Establishments, Banks and Insurance Companies. ☞ Estimates Furnished.

**Standard PULLEY Covering Company.**

Guaranteed to give a Large Increase of Power.

**REFERS BY PERMISSION TO THE FOLLOWING:**

Sun Office, Herald Office, A. Hoen & Co., Murrill & Keiser, Brush Electric Light Co., Jos. Thomas & Sons, U. S. Electric Light Co., E. Wise & Sons, Marburg Bros., Smith, Dixon & Co., Union File Works, C. A. Gambrill Mfg. Co.

GENERAL SOUTHERN AGENT FOR

Potter's Belt Hooks, Alligator and Falcon Wrenches.

GEO. M. LINDSAY 95 Sharp St., Baltimore.

"Nothing is denied to well directed Diligence."

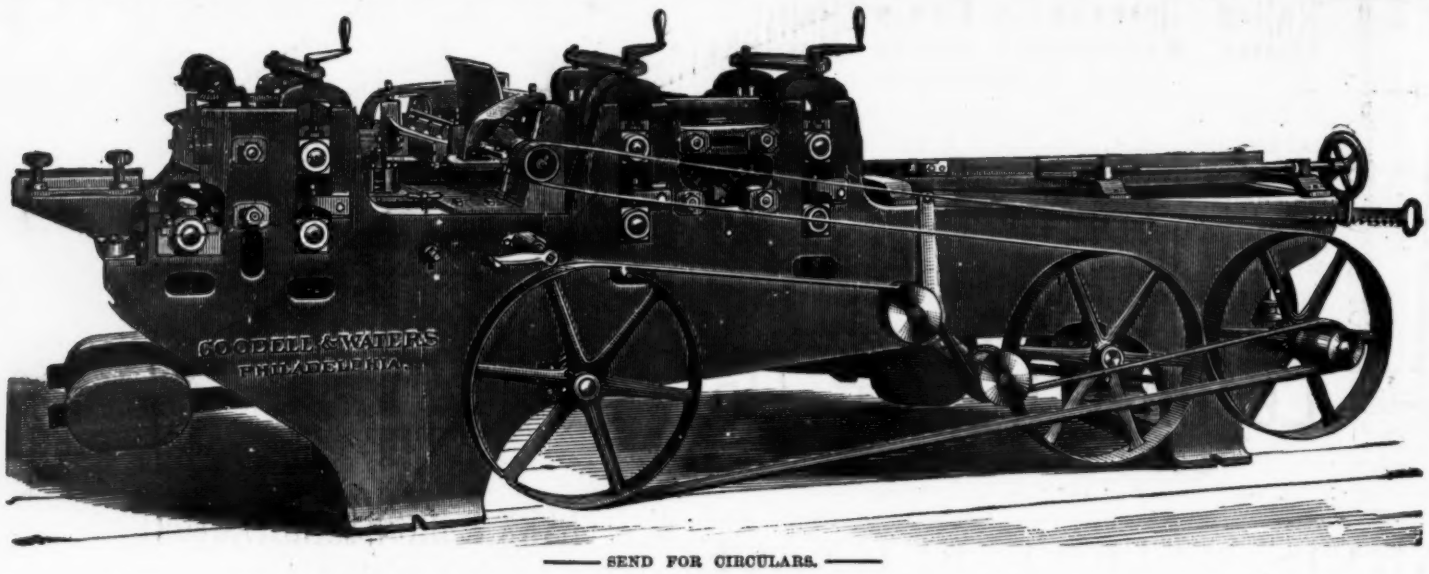
# MYERS SANITARY DEPOT.

**Office and Salesroom—92 Beekman Street.**
**Factories—126 Beekman and 212 Front Street.**
**Warerooms—246 Water Street.**

**NEW YORK.**

**SPECIALTIES IN PLUMBERS' SUPPLIES.**

# WOOD-WORKING MACHINERY




SEND FOR CIRCULARS.

## For PLANING MILLS, RAILROAD SHOPS, CAR BUILDERS,

CABINET, CARRIAGE, SASH, DOOR AND BLIND MAKERS,

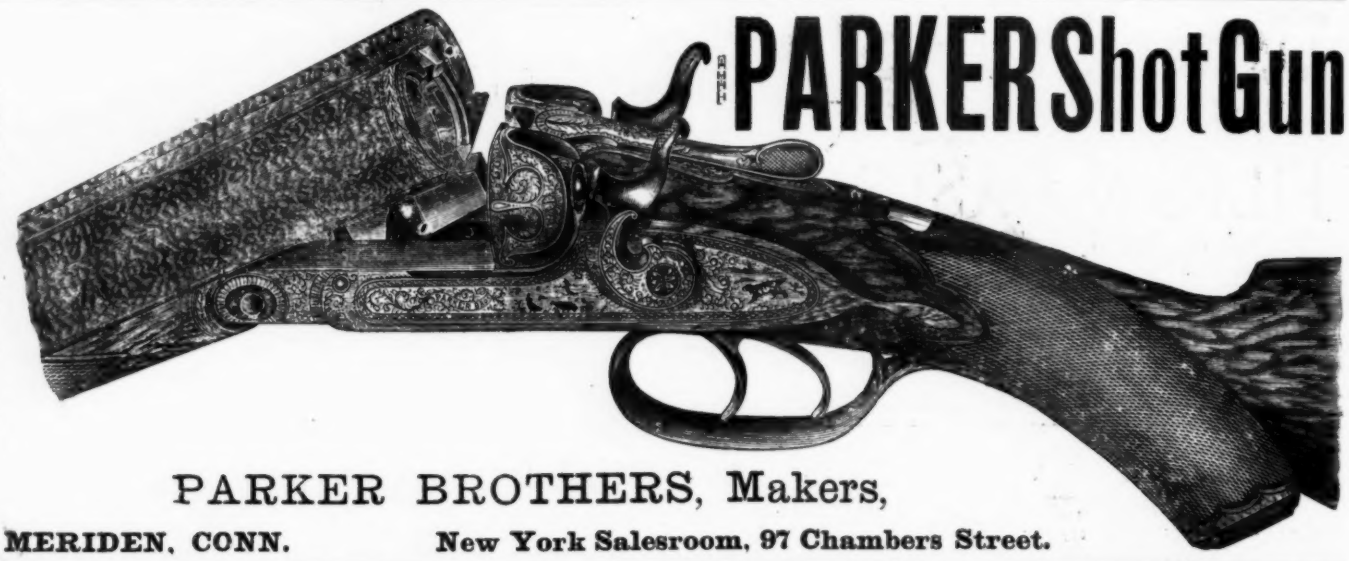
# GOODELL & WATERS,

**Corner 31st and Chestnut Streets, Philadelphia, Pa.**

CUMBERLAND DUGAN & CO., 26 S. Charles St., Baltimore, Southern Agents.

---

Report of the International Gun Trial, held at Bergen Point, N. J., April 3, 1884. Extract from *Turf, Field and Farm* reporting the same: "The Parker Gun, our prominent home manufacture, won the admiration of all by its fine shooting qualities. It registered in both the 10 and 12-bore classes; the greatest number of pellets in the 30-inch circle, and therefore must be awarded the palm for pattern."



# THE PARKER Shot Gun

PARKER BROTHERS, Makers,

**MERIDEN, CONN.** **New York Salesroom, 97 Chambers Street.**

---

# BILLINGS' PATENT BREECH-LOADING SINGLE BARREL SHOT GUN.

Provided with Close Shooting Detachable Muzzle for contracting the shot.

Uses the "A" Brass or Paper Shells.

MANUFACTURED AND FOR SALE BY

THE BILLINGS & SPENCER CO.,

HARTFORD, CONN.

---

**ESTABLISHED IN 1843.**

Am now prepared to sell GUNS, SHELLS, CARTRIDGES, POWDER, SHOT, CAPS, WADS, and everything in the line to fit the Sportsman out in the best manner, as low as any house in the United States. Call and be convinced. Guns made to order, and repaired by skilled mechanics. Goods sent by express C. O. D. and satisfaction guaranteed.

**ALEX. McCOMAS,**

**22 SOUTH CALVERT ST.**

BALTIMORE, MD.

W. S. EATON, Treasurer. J. C. CONVERSE, President.

# National Tube Works Comp'y

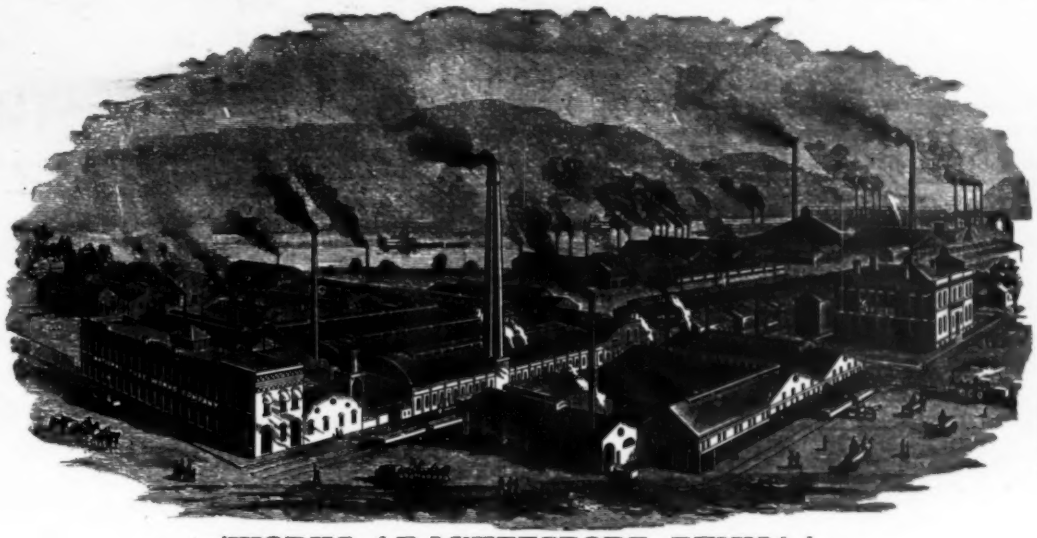
BOSTON: 8 PEMBERTON SQUARE. NEW YORK: 104 JOHN STREET CHICAGO: CLINTON and FULTON STS. ST. LOUIS: 802 N. 2d STREET.

MANUFACTURERS OF
Lap-Welded
WROUGHT IRON PIPE
¼ inch to 16 inches diameter.

Oil Well Tubing and Casing.

Indestructible Pipe
—FOR—
Mines and Salt Wells.

Steam and
Gas Pipe.



[WORKS AT M'KEESPORT, PENNA.]

STANDARD
Lap-Welded
Boiler Tubes.

SEMI-STEEL TUBES
—FOR—
LOCOMOTIVES.

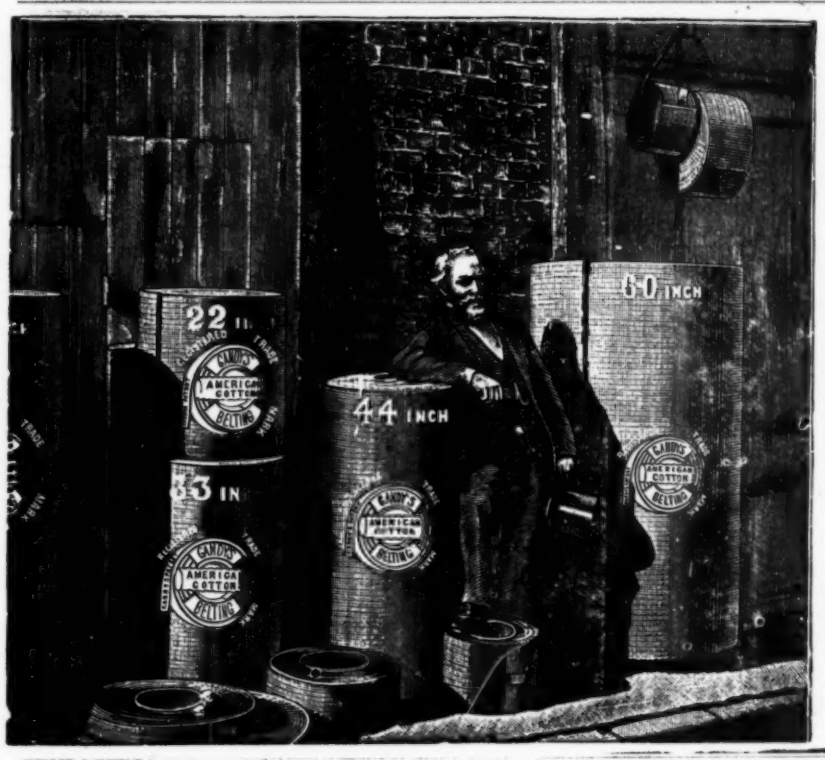
Kalamein Tubes
WHICH WILL NOT RUST.

Mack's Injector
the best thing to feed Boilers with
HOT WATER.

# Patent Water Pipe with Patent Converse Joints

LIGHT, STRONG AND INDESTRUCTIBLE.

A VAST IMPROVEMENT ON CAST IRON PIPE.




SILVER MEDAL AWARDED AT THE "NATIONAL EXPOSITION OF RAILWAY APPLIANCES," CHICAGO, JUNE, 1883.

# GANDY'S PATENT

AWARDED MEDALS AT

Berlin.....1879.
Hamburg.....1878.
Sydney.....1879.
New Zealand.....1882.
Cincinnati.....1879.
New York.....1880.

# MACHINE BELTING

*Made Perfectly Straight and any Length without Joints.*

For Main Driving it is the Best.

Much Cheaper than Leather.

—MANUFACTURED BY—

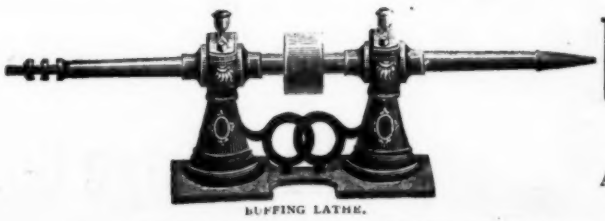
## THE GANDY BELTING CO.

BALTIMORE, MD.

# UNION STONE COMP'Y

Nos. 38 and 40 Hawley Street, Boston, Mass.

—PATENTEES AND MANUFACTURERS OF THE—



BUFFING LATHE.

## UNION EMORY WHEEL.

THE DIAMOND TOOL, FOR DRESSING OR TRUING
—EMERY WHEELS.—

Emery Wheel Machinery and Tools a Specialty.

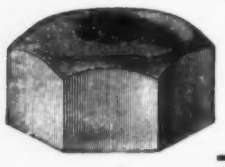
Automatic Knife-Grinding Machines, Wood-Polishing Wheels, Corundum, Grinders' and Polishers' Supplies.
Catalogue on Application.

JACKSON & TYLER, Agents, 16 and 18 S. Howard Street, BALTIMORE, MD.

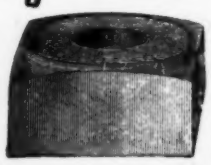
# RHODE ISLAND TOOL CO.

PROVIDENCE, R. I.

## Cold Punched Machinery Nuts.



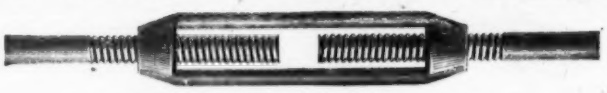
(CHAMFERED AND TRIMMED WITH DRILLED HOLES.)



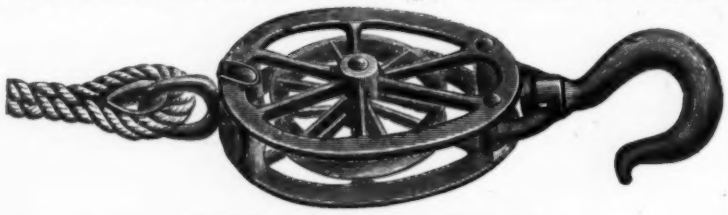
## Finished CASE-HARDENED NUTS

*(THREADS WARRANTED INTERCHANGEABLE.)*

## DROP-FORGED TURN BUCKLES.



## NORCROSS IRON BLOCKS.

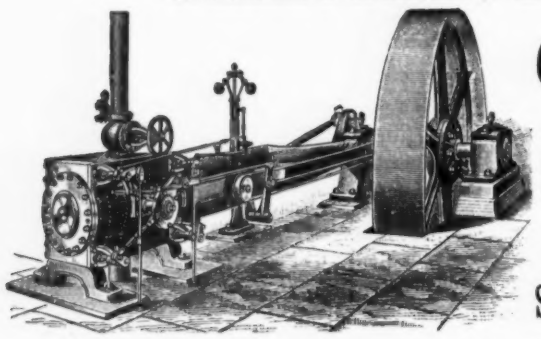


## Sail Makers' and Ship Chandlery Hardware.

**CATALOGUES FURNISHED ON APPLICATION.**

# ROBT. WETHERILL & CO.

CHESTER, PA.



ESTABLISHED 1872.

## Corliss Engine

**BUILDERS,**

Condensing, Non-Condensing, Compound. Great Economy, Durability, Close Regulation.

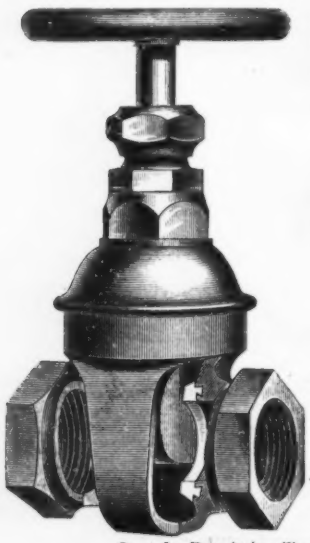
**BOILERS,**

**Shafting and Gearing.**

CORLISS PUMPING ENGINES,

**CITY WATER WORKS.**

# Chapman Valve Mfg. Co.



MANUFACTURERS OF

STEAM, GAS AND WATER

## Valves and Gates.

**Fire Hydrants**

With or Without INDEPENDENT VALVES.

**General Office and Works.**

INDIAN ORCHARD, MASS

**Treasurer's Office.**

**Mason Building, 72 Kilby and 112 Milk Sts., Boston.**

ALL WORK GUARANTEED.

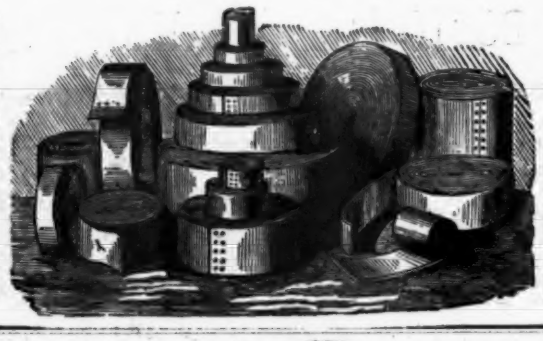
Send for Descriptive Circulars and Price-List. Correspondence solicited.

# BALTIMORE BELT CO.

MANUFACTURERS OF

## Pure Oak-Tanned Leather Belting.

SOLE AGENTS FOR T. K. Earle Mfg. Co.'s Card Clothing AND DEALERS IN RUBBER and COTTON BELTING.



DEALERS IN Cotton and Woolen Mill Supplies, No. 38 S. Charles Street, BALTIMORE.

—ESTABLISHED 1774.—

# FLOURING MILLS.

PATAPSCO 196 SUPERLATIVE PATENT C.A.GAMBRILL Mfg. Co. BALTIMORE.

BUHRS 1774. ROLLS 1882.

This Company owns and operates three Mills, as follows:

**Patapsco Mill A, Ellicott City, Md.** **Patapsco Mill B, Baltimore, Md.**

**Patapsco Mill C, Orange Grove, Md.**

—Having a daily capacity of **1,500** barrels.—

The value of Flour depends on the proportionate quantity of Gluten, Starch, Sugar and Phosphate of Lime Maryland and Virginia Wheat, from which our Patent Roller Flours are manufactured, is unequalled for its purity and superior quality of alible properties.

**ASK YOUR GROCER FOR**

Patapsco Superlative Patent. Patapsco Choice Patent. Patapsco Family. Cape Henry Family.

Patapsco Extra. North Point Family. Chesapeake Extra. Bedford Family. Orange Grove Extra.

## C. .A GAMBRILL MNF'G CO.

**Office, 32 Commerce St., Baltimore, Md.**

SEPT. 18th, 1884.

**IMPORTANT!!!**

## "CAMARET" CHARCOAL ROOFING.

THE sale of nearly 20,000 boxes of **"CAMARET"** Brand of **Charcoal Roofing Plates** in the past year by this house, is sufficient evidence of the appreciation of the quality of this plate. We now guarantee every sheet in a box of **"CAMARET"** to stand any test of bending required—to be well assorted—to be free from wasters—or boxes to be held subject to our order.

**The Palm Oil Coating** renders it less liable to rust than any plate in the market except extra coated plates. We are the direct importers of the **"CAMARET"** Brand from the **Makers**, and carry a full stock of IC 14x20, IX 14x20, IC 20x28, IX 20x28.

Our prices will be made low. Samples sent on application.

**MERCHANT & CO.**

Importers of Tin and Terne Plates,

**90 Beekman St., New York, N. Y.** **525 Arch St., Philadelphia, Pa.**

# Buffalo Shaving and Ventilating EXHAUST ✣ FANS.

SATISFACTION GUARANTEED In ✣ Every ✣ Instance.

SEND FOR CATALOGUE AND —PRICE-LIST.—

## Buffalo Forge Co.

**490 ✣ BROADWAY, ✣ BUFFALO, ✣ N. ✣ Y.**